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*THE FAMILY HEALTH CARE REPORT*

# Steps Toward a National Health Strategy for Korea



*Contract No. AID/ASIA C 1089 (Korea)*
*Project No. 298-15-955-017*
*Contract: Regional Activities (Project Design)*

*Submitted June 4, 1974*
*U.S. Agency for International Development*
*Seoul, Korea*

# FORWARD

The Family Health Care team is convinced that the public-private sector can play a vital role in health services by sharing its managerial talent in a coordinated attack on the problems confronting Korea. This should be done, not because of "social responsibility" alone, but because of the conviction that investments in health care are justified on the basis of national self-interest. USAID is urged to maximize its health care funding by initially supporting an organizational effort aimed at providing a focus and capability for a national strategy to improve health care services. The Republic of Korea stands at a moment in time when it is imperative to rationally organize a health care delivery system. When that moment is seized, Korea will reap the benefits in the 1980s through the increased productivity and well being of its citizens. It is our hope that this report will accelerate the availability of better health care for more people, while at the same time contributing to the overall economic growth of Korea.

Report By: Family Health Care, Inc.
1910 K Street, N.W.
Washington, D.C. 2000(

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# INTRODUCTION

The specific intent of the Family Health Care, Inc. (FHC) contract with USAID/Seoul was to focus on the health delivery systems in Korea, analyze these systems, and then perform a design and cost evaluation of two or three field experiments. These experiments would be aimed at improving the efficiency of selected systems to deliver health care services to less advantaged urban and rural-based populations. Too, the experiments would be designed in such a manner that if the tested ways improved the efficiency of delivering health care services, the new approaches could be replicated elsewhere within Korea.

An FHC team consisting of Dr. Stanley Scheyer, Ronald Epstein and Jeremiah Norris arranged to spend a total of 43/man work days in Korea. They returned on May 28th and submitted this report one week later. The team stands by its basic findings and recommendations as presented herein without enjoining the readers' understanding for the compressed passage of time and place.

During the in-country visits, the team met with Korean public and private sector individuals and institutions that were broadly representative of its health care delivery system, its economic, agricultural, commercial and academic community.

The interview notes on these contacts can be found in Section C, and a list of all individuals who contributed to the team's understanding of the problem follows this introduction.

As a result of the interviews in Seoul, the FHC team selected several areas for field visits: the Seagrave Memorial Hospital and the Rural Health Institute at Okgu; Dr. John Sibley and the Koje-do project; the Pusan Blue Cross; the Chejo-do provincial hospital, health center, sub-hospital, and a regional National Agricultural Cooperative Federation facility on the island.

Although the concentration of these interviews and field visits was primarily on the existing urban and rural health delivery systems, the team also sought a determination on where to base other health delivery field test models. These possible model situations were measured against three fundamental criteria:

1. A Management Capability
2. A Financial Capability
3. A Provider Capability

FHC's experience in both rural and urban health care delivery systems has demonstrated this fact: if each of the above components is not manifestly evident, then the system's overall ability to deliver services moving toward an optimum level of quality and cost effectiveness is seriously open to question and should be held in doubt.

Following the field visits, additional interviews were

conducted in Seoul and the team's findings were shared and tested with key individuals in both the private and public sector. The results of all interviews and field visits were then weighed against the basic criteria to screen and select present programs through which a first-stage design plan could be recommended for field implementation. While it was possible to identify agencies which had in relative strengths managerial, administrative, financial and some provider capability, the FHC team is unable to recommend specific projects.

USAID/Seoul should make an investment which helps to create a central focus leading toward a consolidated national health strategy. This investment is imperative now because incipient forces are rapidly emerging and evolving at the macro and micro level in disparate parts of Korea's health care delivery system. These forces will gain a momentum and constituency in benevolent isolation each from the other until they collectively burst upon the scene as a competitive and undisciplined drain on national resources. USAID/Seoul stands at a point in time when its intervention with the Republic of Korea Government can markedly influence the kind and cost of health care Korean citizens will receive in the decades ahead if it can champion the concept of health as a national investment opportunity. A determination as to where the Korean Government wants its health care system to be, <u>in toto</u>, in the future

has to be made now while these forces can be controlled--now when they can be given direction and assistance in concert with a national health care strategy. To advise less would be to counsel program mediocrity and divisiveness: without a Korean national strategy, USAID/Seoul should remain distant from assisting the emerging forces to move toward a costly end To recommend support of specific projects in the absence of this strategy would contribute to further fragmentation. The yield from investments in design studies will be much greater if those studies are part of a national focus and set of priorities.

What is needed is the initiation of a centralized, institutional arrangement whereby basic policy is formulated, standards developed, training and education of leadership provided, and cost analysis and evaluations of existing programs performed. While such an organizational capability is being assembled and quality staff attracted to plan and to execute a comprehensive health strategy, funding at modest sums can be undertaken in projects which contribute to policy refinements and direction.

The most cost effective use of any health funds by the ROKG and USAID/Seoul is to invest in a national structure through which change can be rationally extended to the whole of the social body.

## A LISTING OF INDIVIDUALS INTERVIEWED BY FHC

1. Adler, Michael, USAID/Seoul Mission Director
2. Alden, John, A.I.D., Washington, D.C.
3. Barrett, Dennis, Program Officer, USAID/Seoul
4. Besa, Alberto A., WHO Public Health Engineer, Seoul
5. Brown, Dick, United Nations Development Plan, Seoul
6. Chong, Dr. Chun Hian, World Health Organization, Representative, Korea
7. Cher, Chai Kyu, Managing Director, Korean Blue Cross, Seoul
8. Choi, Byeong Han, Vice-governor, Cheju Provincial Gov't. of Republic of Korea
9. Choi, Byung Han, Manager, Research Dept., NACF, Seoul
10. Choi, Chang Rok, Assistant Minister of Operations, Econ. Planning Board, Seoul
11. Choi, Soo Il, Chief,Division of Annuity Planning, Ministry of Health and Social Affairs
12. Choi, Young Tai, Professor, Catholic Medical College and President, Korean Industrial Health Association, Catholic College, Seoul
13. Chung, Hi-Sup, Member of National Assembly, Public Health and Social Welfare Committee
14. Davis, Ted, World Bank, Washington, D.C.
15. Davis, William, Assistant Director for Planning, USAID/Seoul
16. Dublin, Jack, Director, AID Cooperative Office, Wash., D.C.
17. Eun, Shin Sang, General Manager, Administration Office, Pohang Iron & Steel, Ltd.
18. French, David, United Nations-Family Planning, Seoul
19. Glenn, Dr. Dorothy, Chief, Population Planning, USAID/Seoul

20. Gray, Charles D., Deputy for Administration, A-AFLI, Wash., D.C.

21. Han, Dr. Kwan-sub, Director, National Institute of Health Seoul

22. Hansen, Howard, Manager, American International Underwriters, (Korea), Ltd., Seoul

23. Hodges, Carroll B., Ph.D., Director, Operations in Korea, The American-Korean Foundation

24. Hong, Dr. Tong Dwan, Director, The Korean Institute for Family Planning

25. Hughes, Dr. James, Executive Director, Kaiser Foundation International, Oakland, California

26. Hurley, John, Office of the Foreign Secretary, National Academy of Sciences

27. Huh, Dr. Jong, Chairman, Dept. of Health Services Admin., Seoul National Univ.

28. Kang, Augustine, General Manager, Asia Confederation of Credit Unions

29. Kang, Mr., Second Sub-chief, Office of Corporate Tax, Min. of Finance

30. Keeton, Jon W., Deputy Director, Peace Corps/Korea

31. Kim, Byong Chan, M.D., Ph.D., Director, Cheju Province Hospital

32. Kim, Dr. Mahn Je, President, Korean Development Institute

33. Kim, Dr. Kyoung-Sik, Director, Institute for Rural Health, Seagrave Memorial Hospital, Okgu

34. Kim, T.J., Assistant Chief Secretary to the Board Chairman, The Samsung Group, Seoul

35. Ko, Sang Kyum, Exec. Vice-president, National Agricultural Cooperative Federation, Seoul

36. Koo, Bon Ho, Research Director, Korea Development Institute

37. Kwak, Chang Yul, Managing Director, National Credit Union Federation of Korea, Seoul

38. Kwon, E Hyock, M.D., Dean College of Medicine, Seoul National University

39. Kwon, Pyung Yi, Manager, Employee Relations, Korea Oil Corporation, Seoul

40. Lewis, Larry, Assistant Manager, Fairchild Semiconductor, Seoul

41. Lwos, David, Country Division Chief for Korea, World Bank

42. Matheson, Evelyn, WHO Public Health Nurse Administrator, Seoul

43. McGill, Warren S., Administrative Manager of Kaiser Foundation International, Oakland, California

44. Miller, Thomas V., Director, Korea Office, Asia-American Free Labor Institute

45. Min, Dr. Chang Dong, Director, Medical Affairs Bureau, Ministry of Health and Social Affairs, Seoul

46. Moon, Mr., Industrial Relations Director, Fairchild Semiconductor, Seoul

47. Morriarty, Dan, Director, World Extension Divison, CUNA, International, Madison, Wisc.

48. Muth, Jack, Deputy for Field Activities, Asia-American Free Labor Institute, Wash., D.C.

49. Niebuhr, Richard, International Monetary Fund, Seoul

50. Oei, Ting Yi, Desk Officer for Korea, Peace Corps, Wash., D.C.

51. Oh, An Soo, Assistant Manager, South Cheju County Agr. Coop.

52. Oh, Soo Man, Chief, Public Health and Social Affairs Section, Cheju Prov. Gov't.

53. Park, Dr. Hyung Jong, Dean and Professor, School of Public Health, Seoul National Univ.

54. Park, Sung Chan, President, Gold Star Company, Ltd., Seoul

55. Park, Sung Ham, Vice-Minister, Ministry of Health and Social Affairs, Seoul

56. Park, Sung Ho, Associate Director, Cooperative Education Institute, Seoul

57. Perry, James, Manager, Fairchild Semiconductor, Seoul

58. Richardson, Blaine, Korea Desk Officer, Dept. of State

59. Sibley, Dr. John R., Director, Kojedo Community Health and Development Project, Kojedo, Korea

60. Simon, Charles A., Director, Far East Industrial Relations, Singapore, Fairchild Industries

61. Sohn, Dr. Choon Ho, President, The Korean Medical Association, Seoul

62. Suh, Kwang-Sun, Director, Korean Association of Volunteer Agencies, Seoul

63. Suh, Dr. Song Je, Director, South Cheju Country Health Center, Chejudo, Korea

64. Suh, Won-Ho, Chief, Marketing Research Section, Research Dept., National Agricultural Cooperative Federation, Seoul

65. Williams, James, Director, Peace Corps, Seoul

66. Yabunaka, Mitoji, Second Secretary, Embassy of Japan, Seoul

67. Yang, Jae-Mo, M.D., M.P.H., D.M.Sc., Dean, Yonsei Univ., College of Medicine, Seoul

68. Yoon, Dr. Sang Won, Director of the Board for the Institute for Rural Health and the Seagrave Memorial Hospital, Okgu

# SECTION A

## I. SUMMARY OF FINDINGS

The basis for these findings by the FHC team are drawn from Sections B, C, and the Appendices of this report. The principal findings identified in the current Korean health care delivery system coalesce around these signal issues:

### A. HEALTH SERVICES DELIVERY CAPACITY

1. The predominant pattern for the management of acute illness is nonphysician.

   a. It is estimated that 70 percent of all acute illness visits are to pharmacists or druggists.

   b. Herbalists, acupuncturists, shamanists, and limited physicians provide a significant amount of the treatment.

   c. Use of paramedical personnel physician extenders in organized primary care settings is illegal and minimally employed. Some exceptions are the Koje-do project, Myon level health workers in family planning and TB control.

   d. Nurses account for a large number of visits in the industrial health centers.

2. The organized delivery of primary care services by physicians is minimally developed.

   a. The predominant pattern of primary care by physicians is a solo, fee-for-service practice in the large cities.

   b. Little, if any, group practice exists.

   c. Almost all private and government hospitals employ full-time physicians. The majority of their time is spent providing out-patient or ambulatory health services.

d. Increasingly, industry, universities, and other institutions are providing primary care services, including physician services, to employees and in a few instances to families.

e. Experimental or demonstration projects focusing on nonhospital services utilizing physicians, nurses, and paramedical personnel as operational teams are only beginning to evolve.

3. Available physicians are clustered in major metropolitan areas.

a. Seoul and Pusan have about 46 percent of the total.

b. The available physician services tend to be clustered around hospitals located in cities or provincial centers.

4. Physician training continues to emphasize a higher degree of specialization, therefore, the relative number of primary care physicians is small.

a. Korean medical schools emphasize specialty training.

b. Recent inter-university decisions and "community medicine" projects indicate a growing awareness of primary care needs.

5. The expansion of the health service delivery capacity in Korea is almost exclusively focused on increasing hospital beds.

a. This expansion is almost entirely in the private sector.

b. Facility capitalization is derived primarily from multiple external donors.

(1) Japan is exploring the construction of a major medical center in Seoul and 12 small-sized hospitals around the country.

(2) The Korean Community Medicine Corporation has raised $1.5 million in Europe and has a U. S. foundation commitment for an undetermined sum to construct hospitals.

(3) MHSA has a plan (presently in abeyance) to construct 144 Gun level hospitals.

(4) The American Korea Foundation, and the World Council of Churches in Geneva, among others, have been involved recently in capital construction.

c. The Korean Government exerts little control over the expansion and distribution of these resources. No overall strategy or allocation process affecting the private sector exists.

6. Available services vary considerably by income group, source of employment, and by geographic accessibility.

a. Village and Myon - Services are by and large health subcenters and occasionally an agricultural co-op (NACF) dispensary.

b. Gun - Some solo private physicians are available in addition to those in the Government health center.

c. Provincial Centers - In Government provincial hospitals and a number of private hospitals, primary care physicians are available both in out-patient departments and private practice. Specialists, except for those employed in the provincial hospitals, are affiliated with and cluster around private hospitals.

d. Seoul, Pusan - Each have major medical centers, medical schools, specialists, and a large number of private practitioners, including:

(1) 43% of all hospitals

(2) 46% of all physicians

(3) 53% of all pharmacists

e. Medical facilities organized and provided by employers are available to employees in a number of areas. These facilities appear to be increasing in number as industry is decentralized. (Examples - Masan, Ulsan, Pong Myong Mine, etc. See interviews in Section C.)

f. A few projects in the private sector are attempting to extend services to the Myon level, principally, the low income population (Koje-do, Okgu, Seoul National University School of Public Health, National Agricultural Cooperative Federation, etc.).

B. COST OF HEALTH SERVICES

1. The current cost of both physician and hospital services in Korea severely limits access to most Koreans.

a. The purchasing power of Koreans for equivalent health service benefits varies considerably.

b. It was not possible to calculate cost of physician visits in systems using only M.D.s, nor the average cost of a day in the hospital from available data. However, FHC used gross estimates for purposes of demonstration and these can be found in Appendix A.

c. The average per capita expenditure for health services, private and public is ₩ 5,344 ($13.50) per year.[1]

d. Charges for private physician visits vary considerably.

e. Charges in institutional settings for out-patient visits are related to the cost of drugs and, therefore, are based on the length of drug treatment.

f. Charges in the hospitals, including provincial, are based on the problem, the procedure, the duration of bed use, and the medication.

g. Although good data is not available, the physician cost per visit in situations where non-physician personnel are utilized is lower. This is directly related, however, to the volume of service units or production in a particular system. For

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1 A proposal for a Community Medicine Program, Dr. Chung, Hi-Sup, p. 54, March, 1974.

example, if a physician is a full-time employee, along with a nurse practitioner and a physician extender, and together they see only 5,000 patients per year compared to a saturated patient load exceeding 5,000 visits per year, then the cost per visit will be high. This appears to be the case in the underutilized provincial hospitals.

h. A number of private health facilities which generate sufficient funds to meet total operating expenses do not by and large serve low income families.

i. All health schemes visited, both public and private, allocate no resources in budget projections for depreciation of medical equipment or physical plant.

C. PERSONAL HEALTH FINANCING/INSURANCE

1. The community insurance programs currently evolving in Korea demonstrate a pattern in some ways quite similar to the U. S. in the 1930s from the viewpoint of risk distinction.

a. Most Korean Blue Cross programs tend to be directed toward a low income or high-risk population.

b. Enrollment is on an individual basis, not group.

2. Private sector employer/employee-operated programs are insurance schemes employing appropriate probability principles.

3. Employer-sponsored insurance cooperatives are particularly evident among Japanese financial enterprises in Korea. Multi-employer cooperation is particularly evident among these enterprises, i.e., Masan.

4. There are no private health insurance carriers in Korea.

5. Health Insurance is viewed negatively by Koreans, partially due to their previous experience during the Japanese occupation.

6. A number of the health systems operated in the private sector which target low income families are dependent on external subsidies other than those from provincial or national sources. The income generated from existing insurance programs (Koje-do, Okgu, Pusan Blue Cross) represents only 10 percent of operating costs. The remaining revenues are from cash pay patients.

7. Existing insurance schemes reimburse exclusively on a fee-for-service basis.

8. Although the present insurance schemes include death insurance, no public or private carrier is available to develop actuarially sound programs and deploy reserves for capital investments in health systems.

9. Existing community insurance schemes, and most company sponsored schemes, are not economically viable as they now operate. They are subsidized by the ROKG, private companies and external sources. The Korean Oil Company employer/employee-operated insurance program operates in the black. But, these schemes showed increased costs and operational deficits:

a. The annual amount of medical expenses per individual beneficiary of medical insurance increased from ₩ 1,489 in 1965 to ₩ 5,352 in 1972 for employees of the Honam Fertilizer Company and from ₩ 589 to ₩ 3,356 for employees of the Pong Myong Mine.

b. The medical insurance program of the Honam Fertilizer Company showed a deficit of ₩ 72,486 in 1969 and ₩ 925,701 in 1972. Pong Myong Mine had a deficit of ₩ 130,485 in 1968, and the Pusan Blue Cross had a deficit of ₩ 444,000 in 1966, ₩ 216,411 in 1970, and ₩ 32,275 in 1971.

10. Substantive interest exists in developing separate insurance schemes and achieving national coordination.

11. Subsidies of ₩ 150 monthly per household enrolled in a Government-approved insurance scheme is viewed as troublesome by certain employers and as inadequate by community groups.

## D. PUBLIC POLICY AND ALLOCATION OF HEALTH RESOURCES

1. There exists no central planning or analytic health resource allocation process in the Korean Government.

a. Investments by the public or private sector are not made within an overall health development strategy.

(1) Foreign philanthropic agencies and foundations are planning investments said to be in the range of ₩ 600 million for hospitals and health systems, particularly in rural areas. For instance, Dr. Chung has raised $1.5 million in Europe for hospital construction and the Pew Foundation has made an undetermined commitment of funds to him for the same purpose.

(2) The Korean Green Cross Corporation has been provided medical equipment from the Japanese Government through the Overseas Technical Cooperative Agency. In one month, March 1973, this amounted to ¥ 9,548,377.

(3) In the new industrial areas, the Japanese Government, through the Overseas Technical Cooperative Agency, has provided ₩ 65 million for medical equipment and indicates it is considering an additional ₩ 200 million expenditure.

b. The Ministry of Health and Social Affairs, with few exceptions, contracts and regulates only for services and programs directly provided in their budget.

c. Several other government ministries impact on the allocation of the health Won.

(1) The Ministry of Finance provides corporate tax credits for industrial health care expenditures in clinics and dispensaries, and for insurance plans sponsored by the private sector.

(2) The drive for industrial health services comes from the Office of Labor Affairs in the Ministry of Health. Although the Ministry must legally approve industrial health activities, the Masan Center, constructed by the Ministry

of Commerce and the Japanese Government, serves 25,000 workers on an annual budget of ₩ 85 million. The center reports to, and is supervised by, the Office of Labor Affairs. The Ministry of Commerce is recommending legislation to authorize ₩ 85 million for a similar center in Iriev. The Japanese Government has stated its intention to provide funds for medical equipment in the facility.

(3) The National Agricultural Cooperative Federation operates 166 clinics with 138 full-time physicians, 28 part-time physicians, and 166 nurses provided by the Ministry of Health. The Federation reports to the Ministry of Agriculture.

(4) The Ministry of Finance provides corporate tax credits for industrial health care expenditures in clinics and dispensaries, and for insurance plans sponsored by the private sector.

2. There is no coordination among multi-national investors, nor is there a method to achieve pooled philanthropy. There is not, at the Economic Planning Board level, a capability which looks at the yield from health care investments, the subsequent costs in failing to address health care problems, or the national health costs in economic investments which create health hazards.

3. There are no ongoing institutionalized methods for bringing together government and private sector health interests around common issues.

4. There is no mechanism to determine the national allocation of health manpower and facility resources, nor to determine, at the local level, the appropriate and most cost effective resources available.

5. The current expansion of the health service delivery capacity in Korea is almost entirely in the private sector.

6. Much of the recent facility capitalization and investments in medical equipment have been derived from external donors, including loans and grants.

7. The purchasing power for medical and health service benefits vary considerably. The farmers, for example, are not able to "purchase" the same package as employees of industrial firms without a significant differential in subsidy.

8. Per capita subsidies by the Government for service benefits are extremely limited. The subsidies provided represent a small percent of actual medical care costs to individuals and plans.

9. Insurance schemes (industrial, public and/or Blue Cross) are not establishing capital reserves.

10. The ROKG is resistant to increasing direct personal health service costs.

11. Workmen's Compensation and Civil Service plans are responsible for high ROKG income revenues, but relatively little is paid out in relation to industrially-induced and work-related health problems.

## E. CONCLUSIONS

The foregoing list is presented not as an indictment, but as the result of an examination of the current health care system in Korea. It is suggested, though, that this list underlines the often conflicting and benevolent forces at work tnat are stimulating the embyronic health care system in Korea toward fragmentation and untoward costs. While Korea's next five-year plan includes social objectives, it is undeniable that national priorities favor industrial development. In the decisional struggle over probable investments, health services will lose unless an appropriate, sensible developmental strategy, which is consistent with other economic growth objectives, is demonstrated.

This examination of the current Korean health care scene moves the observer to a nagging sense of deja vu: there are presently forces at work which are not at all dissimilar from that found in the mid-1930s in the United States by the Committee on Medical Care. The findings of the Committee remind one today that Korea will ultimately unfold a health delivery system quite comparable to what is found in the U. S. at this time. The U. S. costs have been staggering and we are only now engaged in a national debate on how to restrain them. The comparative per capita expenditures on health care in the U. S. for the years 1935 and 1973 are listed below:[2]

| | Per Capita | Private | Public | % of GNP |
|---|---|---|---|---|
| 1935 | $ 22.04 | $ 17.84 | $ 4.20 | 4.1 |
| 1973 | $441.18 | $265.05 | $176.13 | 7.7 |

Several conclusions follow from an examination of the current system in Korea and what it will bring without appropriate ROKG intervention:

1. While the immediate expansion of the health service delivery capacity in Korea will be in the private sector, pressures will build up for national financing and support.

2. The disparity in accessibility, availability, and quality between urban and rural Korea will increase.

3. Per capita subsidies by the Government for benefits will be directed toward the indigent. Polarization of health care capabilities--including the amenities in health care delivery--will differ by economic class.

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[2] Barbara S. Cooper, et al., National Health Expenditures, 1929-73, Social Security Bulletin, vol. 37, no. 2, Feb., 1974.

4. The attempt to redress inequities will most likely be through capital construction and facilities The potential for failure in this course of action is high.

5. The number of physicians will increase, and licensing structures and other controls will diminish mass accessibility to nonphysician providers of services--pharmacists, et. al.--and thus, produce shortages among physicians.

6. The movement toward specialization will grow.

7. Industry and others will be relieved of their responsibilities to provide on-site services and shift to purchasing insurance.

8. Insurance schemes will inflate costs. While the particular charge for each service may be controlled, the amount of services provided will increase.

9. Insurance companies will further inflate costs by offering competing higher-level benefit programs.

10. Employers will tend to seek employees from among the young, healthy, and unmarried to reduce fringe benefit costs.

11. There will be a growing tendency toward professionals grouping among themselves. The professional association will become a more powerful political force.

12. While experimentation does take place, which includes incorporating greater use of paramedics, improved reporting systems, prepaid capitation payment, and the like, these will be frowned upon by the dominant system.

13. No national strategy would have been evolved which effected change at the delivery level.

The time frame in Korea for the opportunity to engage in strategies leading to basic change within a framework of accepted national economic and social values will occur during the next five years. Efforts to create the strategic tools, and to employ resources which evaluate goals and costs, must

be made now. Unless this is done, the subsequent tasks to be undertaken ten years hence will be most difficult and costly.

## II. THE FOCI FOR NATIONAL POLICY FORMULATION

Listed below are five foci through which a comprehensive strategy can begin the process of harnessing the divergent forces presently functioning in Korea's health care delivery system toward a common objective.

### A. FINANCING

There is a need to employ health care financing as a tool to encourage appropriate use of resources. Health insurance is a misnomer. As developed in the West, they are "sickness insurances". They are schemes which pool monies to help pay the costs of illness. Such insurance schemes pay out more the more hospitals and other health resources are used. Unlike Western insurance schemes, some Korean plans include incentive payments for out-of-hospital births. But, this is the exception, and like Western programs, there are no incentives to the hospitals, staff, and communities to reduce demand or use.

Korea is developing community insurance schemes and insurance programs by industry. The idea of having many insurance schemes in an area is justified on the basis of competition. However, rewards for efficient operation of these insurance schemes are minimal compared to the rewards for underwriting "good" risks vs. "bad" risks. For example,

an industry insurance plan usually has low risk: the plan covers a healthy population--or, they would not be working. The Korean Blue Cross movement, for the most part, is going after "bad" risks by enrolling a skewed low-income population on a one-by-one basis. This is bound to have serious problems the moment enrollment reaches a level that providers take the program seriously. The early U. S. history of Blue Cross is analogous to what is going on in Korea with a major difference. U. S. Blue Cross programs "signed up" all hospitals in an area. Whereas, with the exception of Seoul, the Korean plans are centered around single hospitals. Because of similar early risk-taking by U. S. Blue Cross programs of the "bad" risks, they had to be rescued by business and the insurance industry through the group enrollment of masses of workers and the infusion of expert administration. If multiple-competing industry and Blue Cross developments occur in Korea, a similar intervention will be required.

B. THE USE OF THE PRIMARY CARE APPROACH

Primary care, paramedical training, physician extenders, etc., are the buzz words for the current funding of new projects in Korea. The concept these words encompass is that substantial amounts of physician skills are transmittable to lesser skilled persons. When properly trained,

integrated, and monitored, those who are lesser skilled can be part of a system of services and expand the ratio of patients to providers, thereby reducing the per unit costs. Essentially, this is dependent on a high volume, saturated system. The limits of such expansion are unknown. In Korea, one industrial employer is providing over 20,000 services to employees through a team of one physician and eight nurses. (Obviously, many of these services are related to non-industrial encounters.)

There are presently three major groupings of Korean professionals who routinely provide and offer primary medical care on patient demand.

1. Physicians and Persons Directly Controlled by Physicians
   a. Industrial dispensary
   b. Hospital OPD
   c. Nurses and practical nurses
2. Pharmacists and Druggists
3. Herbalists and Acupuncturists

If one takes all of these personnel, including nurses, and personnel attached to and working directly on health matters, e.g., 2,400 family planning staff, 2,000 TB control staff, et. al.; there would appear to be a very large group of health personnel in Korea available to meet the primary care needs of the population. It has been suggested that

properly organized primary care can meet about 90 percent[3] of all Western-demanded health service visits. Because of a probable differing level of expectation, a higher percentage may be met by an organized primary care system in Korea.

The problem of maximum employment of all health personnel into working arrangements for primary care is extremely complex and delicate. The ability to resolve this question, and to at least begin the transition of some of these health staff into an effective primary care system, will ultimately determine future major resource allocations in Korea.

Which of the three groups has the dominant position in the health care hierarchy? The pharmacist/druggist is invariably the first line of health care utilization in Korea: it has been estimated that Korea will have a surplus of over 6,000 pharmacists during the 1980s.

While it is true that there is a concern about an overuse of drugs as a result of a pattern of using the pharmacy for primary care, the key problem may be to define roles and develop a reporting system. Too, a way must be found to compensate the pharmacist when he refers on or dismisses a patient without dispensing medications. In Korea, the dominant dependence on drugs is measured by the fact that the costs of OPD visits are based on the prescrib drugs. The "days of therapy" are considered to be the number

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[3] This emerged from discussions with Group Practice Administrators, June 1974.

of days drugs are prescribed: utilization data is reported by "days of therapy". If no drug is dispensed, the visit is not recorded.

Acupuncturists and herbalists in a Korean primary care system present their own set of problems which were not addressed by the consultant team.

The issue in primary care of deployment of personnel, exploitation of current levels of knowledge, appropriate upgrading of skills, wise use of personnel at their levels of skills, costs of services, etc., are critical, major economic issues facing Korean health planners. Increasing the supply of physicians by barring them from emigrating may appear in the short run to offer a solution. However, it will undoubtedly do nothing in itself to solve Korea's health problem; on the contrary, it will over the long run increase the costs. If the highest priced personnel and physicians are not fully occupied, they will tend to undertake less skilled roles and increase costs. Primary care resources rest not in their numbers, but in their organization and appropriate use.

C. THE USE OF OWNERSHIP

Ownership and the return for possession constitute a major force in productivity, investment, and demand. A strategy which emphasizes, in the health sector, a set of

competing ownerships to share in the efficiencies of the other is not now present in Korea. For example, reduction in demand on physicians who are paid retainers increases the income per unit to physicians. If such "savings" are shared with a larger community of patients, they then can be reinvested to yield still greater returns for all parties. The concept just described is applicable to prepayment. Under appropriate controls it is applicable to fee-for-service also. Certain changes in the system of return for ownership are critical. Currently, the provider earns more money the more people he sees. The trick is to have him manage his practice in such a way that while his income may increase, his charge per unit of service may be less because he employs and charges for nurses, family planning workers, et. al., as part of a system of services. That is, with the proper protocols, these staff can be employed to treat patients, i.e., blood tests, patient histories, etc., leaving the physician to maximize his time and his medical skills at the appropriate level. Another example: the hospital achieves profits the higher the utilization of bed capacity The same goal is desired, but bed capacity must be drawn from a larger population base so per person costs can be reduced for the total population.

Communities or employee/employer groups, as well as providers, should benefit from the system's ownership. To

the extent a community undertakes health measures which change demand and profit accrues under an insurance scheme, that community should then enjoy a return for further investments in health.

The opportunities are quite limitless, even through insurance. No one can visit Korea without being impressed with the energy of its people. As communities become aware of the cost concerns and how their failure to engage in prevention increases cost, there is reason to hope for change in behavior. The problem of achieving community involvement, peer leadership, and the like, in an atmosphere which contributes to good health is no small undertaking. It must be linked to economic returns.

In the United States there is a trend toward community ownership of health systems rather than provider ownership. This is particularly evident in the National Health Service Corps program in which young M.D.s serve in critical health manpower areas. It is the responsibility of the community to establish the health care system; the Government only provides the M.D. and it is then reimbursed reasonable costs for his services.

D. DEMAND PATTERNS

Demand is not only a function of a patient's perceived need, but often, particularly among Western-oriented

practitioners, a matter determined by the provider. Of course, stimulated demand is quite justified, but when it results in an unnecessary hospital stay, or drug prescribing the additional costs are multiple. Demand must continuously be viewed as being worthwhile only if it reduces more costly demand. For instance, it is more cost effective to create a demand for polio immunization than to train and allocate M.D.s and therapists to treat polio patients in hospital-based facilities. Demand can become quite economically and appropriately expressed within a properly employed insurance scheme, a primary team, and back-up hospital resources.

E. RESOURCE ALLOCATION

Resource allocation is the end result of projected needs. To the extent these decisions can be made within the system itself at and by the lowest level of delivery, larger cost decisions will be that much more certain. When the primary care team and community determine that parasitic infestation control can be achieved, a subsequent resource allocation for hospital beds has become influenced.

# III. FAMILY HEALTH CARE RECOMMENDATIONS TO USAID

## GENERAL RECOMMENDATIONS

Family Health Care recommends that USAID suggest to the Republic of Korea Government a three stage health service development process. The three stages are graphically illustrated in Chart 1 of the following page.

The key recommendations are summarized in three stages:

Stage 1

1. Initiate and develop a new nonprofit institution--the Korean Health Development Corporation (KHDC).

2. Simultaneously initiate two or three demonstration efforts which address long-range health service development and financing issues.

3. Analyze several existing Korean delivery systems.

4. Study health delivery systems and financing mechanisms in a number of industrialized countries, e.g., England, Norway, Sweden, U. S., Japan, etc.

5. Consider (by ROKG) placing a "hold" on large scale resource allocations for the development of health service capacity, especially hospital beds and insurance programs.

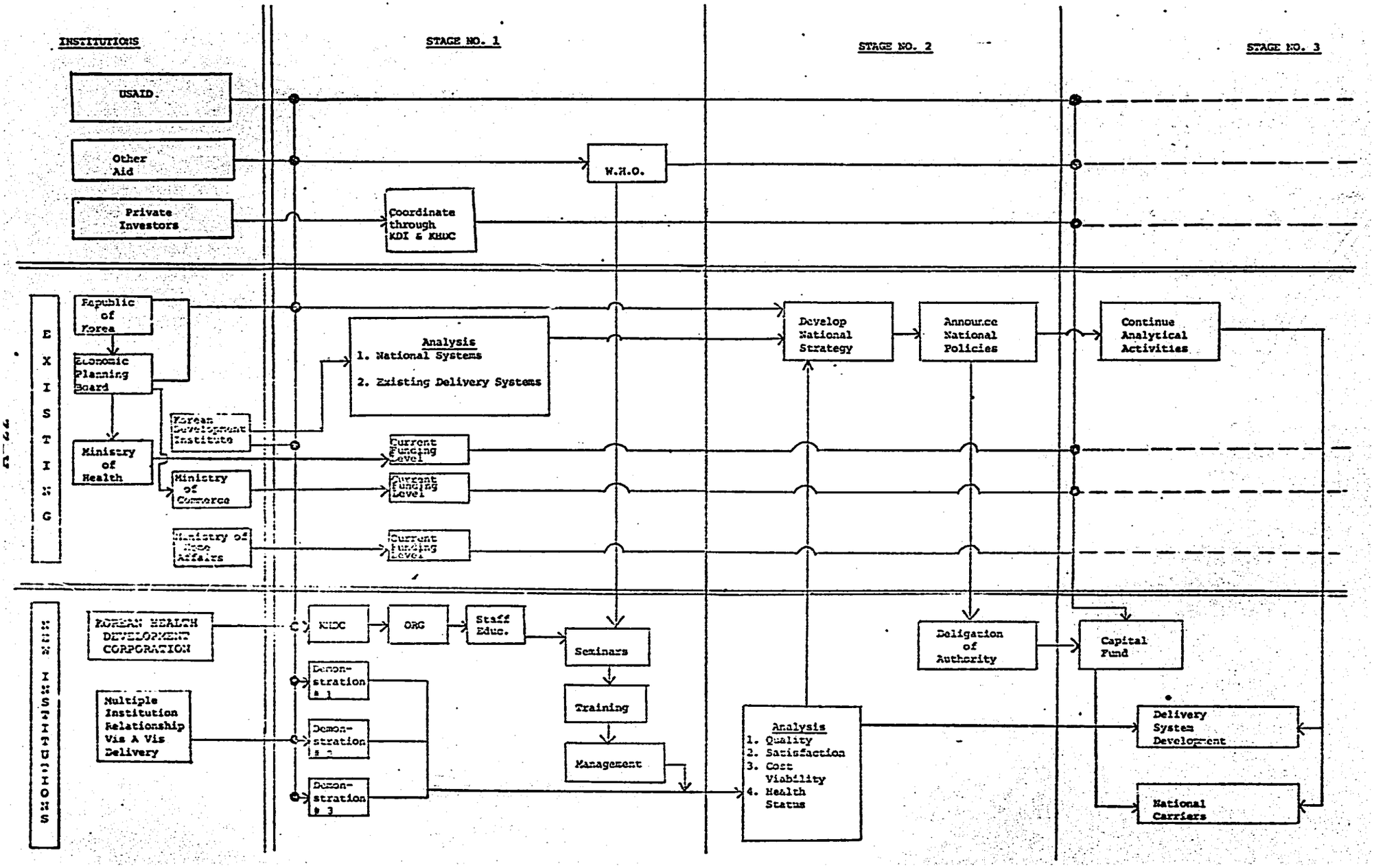
   a. By the Ministry of Health

   b. By the Ministry of Commerce

   c. By the Ministry of Home Affairs

6. Establish a policy which welcomes external gifts and loans, but encourages their coordination through the new corporation.

# CHART 1


INSTITUTIONS
STAGE NO. 1
STAGE NO. 2
STAGE NO. 3
USAID
Other Aid
Private Investors
W.H.O.
Coordinate through KDI & KHDC
EXISTING
Republic of Korea
Economic Planning Board
Ministry of Health
Ministry of Commerce
Ministry of Home Affairs
Korean Development Institute
Analysis
1. National Systems
2. Existing Delivery Systems
Current Funding Level
Current Funding Level
Current Funding Level
Develop National Strategy
Announce National Policies
Continue Analytical Activities
NEW INSTITUTIONS
KOREAN HEALTH DEVELOPMENT CORPORATION
Multiple Institution Relationship Vis A Vis Delivery
KHDC
ORG
Staff Educ.
Demonstration #1
Demonstration #2
Demonstration #3
Seminars
Training
Management
Analysis
1. Quality
2. Satisfaction
3. Cost Viability
4. Health Status
Delegation of Authority
Capital Fund
Delivery System Development
National Carriers

7. With the assistance of the Economic Planning Board, begin the process of centralized planning activities.

Stage 2

1. Analyze the health delivery demonstration projects initiated in Stage 1.

2. Examine results and recommendations of National Health Services study. (No. 4 above)

3. Develop policy and strategy for National Health Services in Korea.

4. Announce at presidential level a national health policy.

5. Coordinate available capital from multiple sources through the Economic Planning Board.

Stage 3

1. Delegate authority to the Corporation for the administration of health service capacity development

2. Establish national insurance carriers.

3. Maintain an independent health service analytical capability.

The development of a full and effective capability in KHDC to perform the above outlined functions will require time. FHC suggests, therefore, immediate funding to the Korea Development Institute to commence the development of this capacity within KHDC and to provide leadership in undertaking certain tasks now.

FHC has been assured that KDI considers this an appropriate undertaking and is willing to take on

responsibility for the Corporation's development when the question is presented to them through ROKG. (See interview notes, May 23, Section C.) KDI's sponsorship would be temporary. However, a long term contractual relationship should be created between KDI and KHDC. A formal associatio of this nature would provide an ongoing analytical capability to the health Corporation.

In addition to the institutional link with KDI, FHC recommends a relationship be formally established with the Ministry of Health and Social Affairs. This Ministry can offer assistance to the new Corporation, e.g., the work of its statistical reporting section (see Chart 1 for recommended relationships). In light of MHSA's past involvement and capability, FHC has weighed whether MHSA should be recommended as either the agency or sponsor of KHDC. This was rejected because many of the issues to be addressed (some of which now involve MHSA) require a neutral setting for consideration and resolution. In the long run, although from time to time differences may exist between the new Corporation and MHSA, the MHSA responsibility to represent the peoples' interest in maximizing quality and assuring equity to citizens will be maintained. The long range objective is to move the Ministry of Health away from being the provider of services to contracting for services. Too, the National Institute of Health was considered, but

as this organization is engaged almost exclusively in biomedical research, training, and drug control, it was felt that further thought to NIH as the sponsor was inappropriate.

In addition, a formal linkage is recommended between the new Corporation and the Economic Planning Board. Representation from EPB to the new Corporation would assure consideration within the framework of national policy which would redound to EPB in future definition of legitimate national resource allocations for health care services.

FHC recommends that the Corporation view its own long-term economic self-sufficiency as partially dependent upon developing staff capabilities which will be contracted for to provide technical assistance at all levels of health care delivery, financing, and marketing in Korea.

It is absolutely essential that the Corporation establish from the outset that, although it is nonprofit, it is going to run itself in a business-like fashion. When technical services are provided by KHDC staff, they should be billed.

After the first six months, the Corporation should develop its own long-term plan of action. Like any new organization, it will face a series of immediate policy decisions. These deal with matters of public relations, information, standardized data collection, construction of public and private facilities, etc. The sponsorship by KDI will assist the Corporation in avoiding mistakes and

FHC recommends that initially a strong administrative unit out of KDI, and outside resident consultants, be organized for day-to-day administrative decisions until the parties decide it is no longer required.

The approach of KDI in relating to an American or other foreign institution has equal merit for KHDC. Probably what makes the most sense is for two relationships to be developed: one at the macro level (like Harvard) and another at the micro level (perhaps Seoul National University School of Public Health, Pusan University Medical School, or a consultant firm).

To develop the competencies and assist in reaching the larger goal of a better health delivery operation, the Corporation must itself contract for certain studies or reports.

However, FHC does not recommend KHDC financing total health delivery systems, nor in the immediate future underwriting development, but rather contracting for short-term projects which are relatively easily executed. It is recommended that these contracts be let as soon as possible because such action will force a crystallization of roles and responsibilities for the KHDC.

The precise long-range role of KHDC will be decided and specified by the ROKG in Stage 3 of the suggested developmental process (see Chart 1). The key issue to be

decided by the ROKG is the degree of control and regulation that it will give to KHDC over the allocation of both public and private capital resources for health service development.

## SPECIFIC RECOMMENDATIONS

STAGE 1

### Recommendations

A. Recommendation #1

FHC recommends the establishment of an independent nonprofit organization, the Korean Health Development Corporation. This Corporation would operate at a national level to provide to the country a central capability for technical assistance, funding, resource allocation, and directions for the development of the health service delivery capacity.

FHC recommends that USAID and ROKG finance the organizing of the Corporation under the sponsorship of KDI at a funding level not to exceed that already contemplated in specific health care projects in FY '75 and '76. Sponsorship of KHDC by the Korea Development Institute will assure from the start that the Corporation will have available to it KDI's organization, history, experience, and institutional skill. Although KHDC's mission is more varied than KDI, involving program plans,

finance, and persuasive community actions, FHC recommends KDI because the analytic instrumentalities required at a macro level in health can only be derived from a micro build-up and analysis. This analytic skill at a micro level--and bridging that knowledge to the macro scene in an organized way with priorities and planning skills--is the significant contribution sought from KDI's leadership.

KHDC should have a policy board drawn from a full spectrum of the private and public sector who would recognize in KHDC a vehicle for resolution of differences. There are organizational strengths in Korea that can be drawn from industry, the universities, trade associations, etc., as well as from the health field and these should each find their place on the Corporation's board. From discussions with leaders in the public and private sector, FHC is convinced this leadership understands the need to create a new organizational focus on national and local health care issues. Korean leadership is quite capable of the necessary steps to implement the health Corporation's programs.

The principal function of all KHDC assistance should be the training of local skills to develop capabilities which will permit a guided, incremental development of

an expanding health care system. The tasks to be carried out by KHDC are as follows:

1. Provide long range leadership, policy, and direction to the development of the Korean health delivery capability by addressing:

   a. availability of primary care service to all Koreans.

   b. appropriate number and distribution of hospital beds.

   c. coordination for the ROKG of multiple public and private health service delivery resources for optimum efficiency and utilization.

2. Direct coordination of ROKG's public and private capital investment into health service development.

3. Coordinate manpower availability in appropriate ratios to meet the delivery requirements.

4. In each five year plan, prepare the ROKG (EPB) for the incremental development of the Korean health delivery system. This plan must incorporate:

   a. role and activities of the Ministry of Health

   b. health aspects of all other ministries

   c. the private sector investments

   d. manpower priorities and training needs

5. Maintain a close relationship with Korea Development Institute, Ministry of Health, and other Korean institutions, such as Seoul National University School of Public Health etc., to carry out continuous monitoring, research, and evaluation of all the health service operations in Korea. Careful attention should be placed on the service output of individual systems.

6. Provide technical assistance and training to local health delivery system sponsors in:

   a. administrative procedures and protocols

   b. medical record keeping

   c. budgeting and financial management

   d. manpower organization, structure, and optimum utilization

   e. facility finance and development

   f. information systems, data collection, processing analysis, and reporting.

7. Maintain close working relationship with developing insurance carriers. Assure payment mechanism which, whether through prospective payment for services or through retrospective reimbursement, pay for the most effective and efficient delivery modes.

B. Recommendation #2

FHC recommends that the Republic of Korean Government under KDI's sponsorship initiate, as soon as possible, in Stage 1 two to three pilot health delivery demonstration projects. If the KHDC was fully developed, these projects would logically fall under the auspices of the new Corporation. FHC feels, however, that time is of the essence and two to three well-documented pilot efforts directed at the demonstration of proven population-based health delivery principals will assist the ROKG in the Stage 3 development of a National Health Delivery Strategy.

FHC believes that KDI could, with assistance, develop these pilot demonstration efforts. The ideas suggested above would require, prior to KDI's support, a complete and thorough programming effort. Technical assistance resources to KDI, over and above the direct costs of the projects, would be essential. The essential analytical aspects of the demonstration projects, once initiated, will be discussed under Recommendation #3. FHC recommends that the following principles be applied in the initiation of the pilot efforts:

1. Either new or existing Korean institutions assume responsibility for the delivery of services to defined populations.

2. Community ownership and accountability be tested for the development and operation of health services.

3. Personal health financing be applied to a minimum level of service benefits available to the entire community and not be geared toward one economic group.

4. The delivery system employed be able to isolate and document key components resulting in improved service production and quality.

Employing these principles, FHC recommends that the initial demonstration under KDI's leadership place a priority on:

1. The successful employment and documentation of nonphysician or paramedical personnel to expand service capacity to a defined population.

2. A pilot effort which places responsibility for the operation of health services on a community accountable board.

3. The initiation of a prepaid health insurance plan where services are not paid for on reimbursement or a fee-for-service basis.

4. The geographic decentralization of free standing primary health services around a central hospital or secondary facility.

5. The integration of existing government run "public" health services, including family planning, TB control, and MCH into a locally sponsored and operated health service effort.

6. The successful integration of existing primary care resources into an organized system, including pharmacist, acupuncturist, physician, and paramedical personnel.

7. The operation of a local health service program on the basis of a community-rated insurance or prepayment scheme.

C. Recommendation #3

USAID should fund, under KDI's sponsorship, a number of studies utilizing available Korean resources.

1. Studies of National Health Service systems in a number of countries including:

   a. Norway, Denmark, Sweden, Finland

   b. Japan

   c. England

   d. Yugoslavia

   e. Canada or the United States

   f. Others as indicated.

The analysis should focus on the ways these countries allocate resources in meeting the population's health service needs. From this should be gleaned KDI's Stage 2 recommendations to the ROKG on a National Health Service development strategy for Korea (see Chart 1).

2. KDI must document, over the next few years, the progress and results of projects initiated in Recommendation #2. This will require the development of a conceptual framework and research methodology by which service production or "output" can be measured and compared. In Sections B and D of the report, FHC conceptually outlined one way of beginning to examine health delivery systems within the framework of an overall pluralistic system.

3. FHC recommends, under KDI's sponsorship, a series of seminars and conferences which again focus on key questions and issues which must be addressed by the ROKG in the near future.

To illustrate the requisite analytical requirements, a range of problems and questions which must be addressed are listed below. They are not presented in any order of time, importance, or priority. But, they do represent a list of problems which FHC has raised in its own internal discussions.

1. What population size is optimum in support of the least expensive, most efficient primary care team?

2. What is the effective mix of primary care team members?

3. How can "payment" be made to the pharmacist when he does not prescribe drugs?

4. How can a reporting system be employed which involves druggists, et. al.?

5. How can an actuarially sound premium charge for death benefits be established for industries and cooperatives when enrollment in them will be incremental?

6. Should different government subsidies be based on rural/urban average income, etc.?

7. Should KHDC develop national health goals? (e.g., immunization, TB control, or should KHDC foster local health goals, or a combination?)

8. How can the new community movement (Saemael) incorporate at a community level national goals (e.g., 100% of children immunized)? How can it be involved in raising the performance and acceptance level of local health facilities?

9. Although exact precision cannot be achieved in cost benefit analysis, how does KHDC economically achieve an inventory of current health problems to create investment priorities?

10. Why can't subcenter monies be turned over to a community which demonstrates an ability to organize itself?

11. What is the most effective method to provide education to current health administrators? To keep them informed?

12. How can KHDC identify worldwide on-site training locations for Korean administrators, and identify administrators who qualify for such training?

13. How does a national minimum level of benefits become established?

14. What Government health care facilities might be turned over to private enterprise efforts? To cooperatives?

15. Can the Mothers' Club be employed in a national strategy for improving health?

16. Does the WHO program of multiple functions for the health care team have wide applicability?

17. Can KHDC create regional KHDC's in major cities?

18. How do monetary reports on funded projects get circulated?

19. Who undertakes strategies to bring large employers together a la Japanese?

20. What kind of major economic representation is required for KHDC to assure maximum employer participation?

21. Why shouldn't integration of family planning and other staff be attempted nationally rather than in pilot projects?

22. Can NACF mount education campaigns directed to community organizations?

23. Does KHDC look at minimum hospital needs? How does knowledge of subcenters and other developments leading to lesser hospital use get introduced into decisional process? Doesn't KHDC have to establish a major library from international sources?

24. Has the MHSA's reporting section the capability to help develop a reporting system? Or Seoul National University?

25. How do dependents of military receive health care? How do they become integrated in community systems?

26. How does an urban and rural insurance thrust buy into each other for services?

27. What is the mechanism for translating community concerns to national levels?

28. Should health care planning by-pass government and be a function of government-approved agencies?

29. What does a pooling of international philanthropy with national goals and priorities do to these money sources? Can't such capital be actually increased by focus of national attention on such a contribution?

30. How can "identification" and "public relations benefits" be maintained for international contributions, e.g., Germany, Japan, etc.?

31. How can a freeze on capital construction be realized? Cannot a formula be established directing capital funding to underserved areas? Isn't there a need for control on hospital beds?

32. How can industrially-supported health facilities be employed to serve the community at large?

33. How can top-level seminars be organized to assure meaningful addressing of real problems? (Examine KDI experience.)

The answer to these questions are difficult, but must ultimately be woven into the development of a national Korean health strategy.

The suggested seminar and conference series focusing on these questions over the next few years will assist KDI to provide the ROKG policy direction in the future.

On the basis of FHC's brief discussions in Korea, the team suggests the following potential Stage 1 projects which, if implemented, will provide the ROKG some insight for future policy consideration. The FHC suggestions identify specific Korean institutions which, under KDI's overall direction, might take the lead in

the implementation of the pilot effort

## Suggestions

A. Project I

Shift the responsibility for Myon level health service activities to a locally-based organization. The key objective of this pilot effort would be to compare the performance of local ownership and administration of health services to those provided directly by the national and provincial governments. Observations in other countries, such as the Solo project in Indonesia, indicate that shifting responsibility for health services to local sponsorship in which the individuals served have a "stake" in their own health facilities can have significant results. Improvement in health status becomes an integral part of the communities' collective action in the developmental process.

Potential Initiators: National Agricultural Cooperative Federation; Mothers' Club; National Blue Cross; Yonsei University.

Activities

1. Organize in one or more contiguous Myons, a combined consumer and provider community health council.
2. Incorporate the council as a cooperative organization.
3. Turn responsibility for the administration and direction of health activities, currently provided in the Myon subcenter, over to the community health council.

4. Shift employment of subcenter staff to the council.

5. Provide the council funds (subsidy) equal to current allocation for the subcenter.

6. Establish health goals through the council for the cooperative as part of New Community Five Year Plan.

   a. Safe water supply for every village home.

   b. TB eradication.

   c. Decreased infant mortality.

   d. Family planning objectives.

   e. Others

7. Provide the cooperative staff training and support in establishing administrative and technical policies, procedures, and protocols

8. Assist the council to establish a prepaid insurance program with Ministry of Health approval.

B. Project II

From a health facility base, an insured program, or from a combination of the two, develop an effort seeking to expand the population base of the persons served. This expansion should occur under sound actuarial basis, and it would be a design to determine how administrative and delivery costs are effected by increasing population base.

Possible Sponsors: Korean Oil; Masan Industrial Estate; Okju Blue Cross/Seagrave Hospital; Industrial Physicians Association; Catholic Medical Center.

Activities

1. Evaluate validity of current costs to groups in expanded population base.
2. Determine staffing needs with particular emphasis on rationalizing skills given a larger population base.
3. Sample current employer/employee expenditures among expanded population base.
4. Create market strategy.
5. Develop contractual linkages between resources at residential levels and central agency (employment level).

C. Project III

From an existing base of services, determine how to incorporate pharmacists, acupuncturists, and possibly others, into a coordinated delivery system to change demand and enhance quality.

Possible Sponsors: Provincial Hospital; Sibley (Koje-do); Private Hospital; Hospital Association; Private Industry Health Center; University Health Program; Private Doctor(s).

Activities

1. Define by agreement with nonphysician providers, roles, functions, and patient management protocols.
2. Establish monitoring, quality review, and reporting systems to measure attitudes, behavioral change, and organizational problems.
3. Design user education material.
4. Formulate new training requirements for participating providers.

D. Project IV

Convert a provincial hospital and subcenter to a community-based prepaid health plan.

Possible Sponsors: Ministry of Health; Ministry of Home Affairs

Activities

1. Experiment with turning over the operation of a provincial hospital to a public accountable board under agreement with the provincial government.

2. Develop contractual relationships with existing providers (hospital-based or other to provide services.

3. Develop community-based prepaid insurance program.

   a. Possible location: Island of Cheju-do.

      (1) No other private hospital facilities available on the island

      (2) Interest on the part of the provider

   b. Major enrollment source: County cooperative is a member of National Agricultural Cooperative Federation.

   c. Management capability: The existing administrative, financial management, and facility-financing capability of NACF, with training, could be utilized to manage the health plan. This would require KDI to bring together the resources of:

      (1) the Ministry of Health

      (2) the Ministry of Home Affairs

      (3) National Agricultural Cooperative Federation

(4) the Cheju-do Provincial Government

(5) a technical assistance resource.

d. Develop a facility development plan consistent with the overall health plan's immediate and long-range needs and provide capital finance of appropriate facilities no longer dependent on Ministry of Health allocation.

STAGE 2

Stage 2 of the suggested health service developmental process involves the integration of the information developed in Stage 1 into a National Strategy for Health Services development and the announcement of this strategy by the ROKG President. This process would involve KDI, MHSA, KHDC, and EPB. A determination must be made then by the ROKG on how the national strategy will be carried out. It is FHC's assumption that the Korean Health Development Corporation will be in the position to direct and coordinate the accelerated developmental effort. This is dependent on the extent to which KDI is successful in launching and assisting the Corporation in developing the capacity to perform the functions described above.

STAGE 3

Stage 3 represents the implementation phase of the National Health Service Strategy. The KHDC would be, under this scheme, the central focus through which the ROKG would implement its developmental process.

1. The coordination of both public and private capital resources would be "invested" through this organization consistent with the national priorities and developmental strategy. This essentially would be a revolving loan fund.

2. Provide technical assistance, training, and support to individual delivery systems.

3. Set manpower needs and priorities.

4. Monitor the health service developmental process and report to EPB.

5. Develop three national carriers and a coordinating mechanism among all locally established carriers.

   a. One carrier directed to employer/employee relations for employers having more than 50 employees, including Government employees

   b. One carrier directed primarily to employee groups of less than 50--agricultural workers self-employed, unemployed, etc.

   c. Death benefit carrier.

SECTION B

# I. CONCEPTUAL FRAMEWORK FOR THE ANALYSIS

## A. ASSUMPTIONS

In initiating the analyses of the health care system in Korea, the FHC team developed a conceptual framework[1] under which a number of interrelated aspects of the total delivery system could be examined. The team posited three components for an operational system:

1. Population to be served
2. Providers of services
3. Managers of the system.

In connection with managers of the system, the team assumed that even with a direct patient-provider relationship, a management function exists which brings the parties together. FHC then began to identify critical variables affecting the production of health services to subgroups of the population.

Integral to this conceptualization were the assumptions that:

1. The delivery of health services will remain pluralistic in Korea. Even systems created to achieve a common mold soon engage in

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[1] Attention to the FHC development of a health care conceptual model is presented in this report to demonstrate how problems dealing with health cost effectiveness, resource allocation, capital investment, etc. can be dealt with through modalities comparable to other economic models.

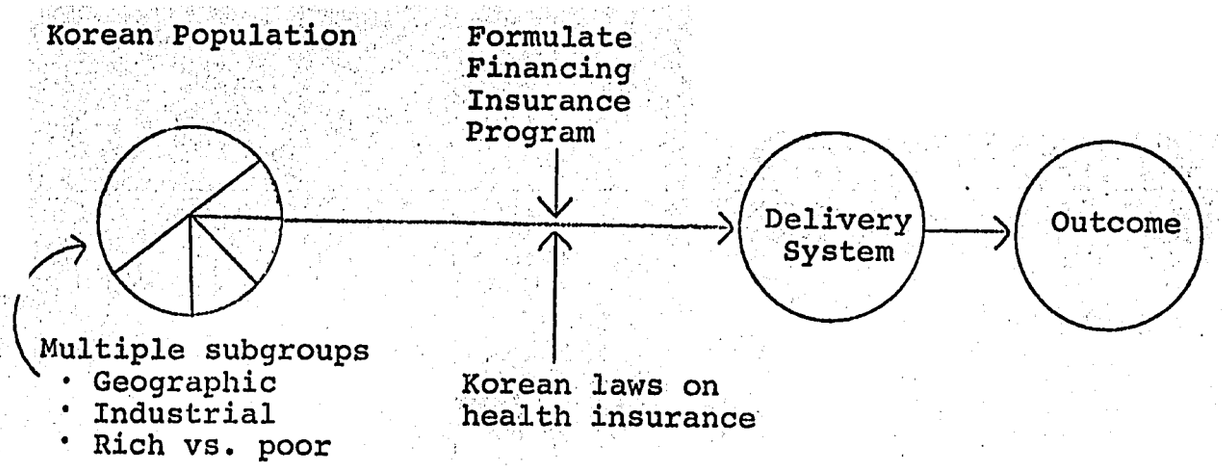
experimentation of alternatives to permit variation in organizational structure and efficiency.

2. For the immediate future, there will be both public and private sector financing of health care insurance. Multiple sources for capital health financing will evolve and continue to exist.

3. Additional institutional and organizational forms for the development, financing, administration, and management of delivery systems will also continue to evolve.

4. Korean attitudes and behavior, in relation to health services, will change over time.

In examining both the total system and particular health systems, FHC queried about the Korean expectations for future health services. What are the 10-20 year goals and how might these be translated into realistic objectives for the next five year plan? And, what specific projects, when critically examined, may assist decision makers to weigh their course of action? Further, medical production units themselves are not static and the settings of these units are impacted by decisions outside of direct medical services. Matters being debated and implemented now can and will dramatically affect the future outcome in Korea. For example, if and when the existing health insurance law is implemented it will substantially effect the allocation of resources to deliver health care. In turn, that will impact on the unit cost of delivering service to the population. This can be illustrated as follows:



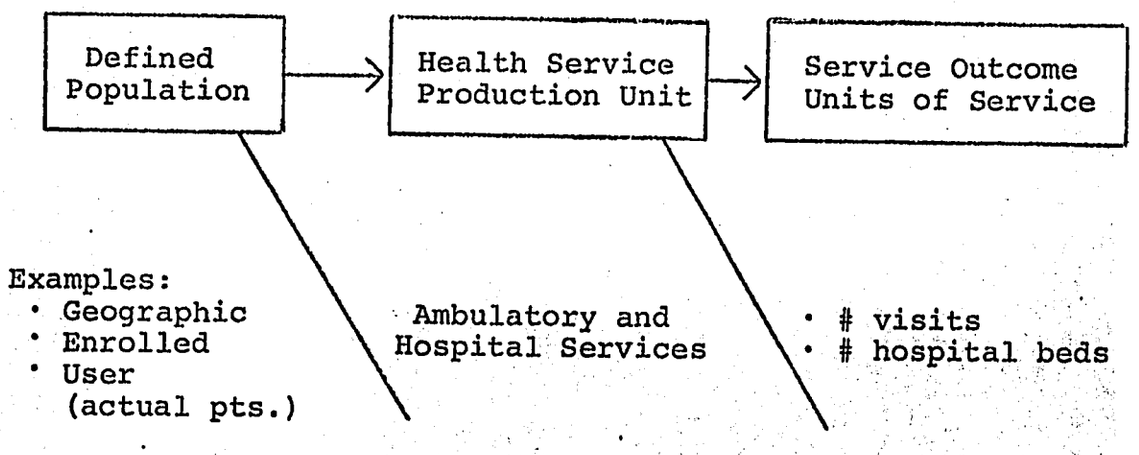

If insurance only buys or reimburses for hospitalization, then hospital beds will most likely proliferate and become the predominate resource in the delivery system. The system can become highly dependent on an extremely expensive resource to manage its health problems. If Korean law states that paramedical personnel cannot be used as physician assistants or extenders, then the delivery system is totally dependent on the highest cost personnel to deliver the individual units of service. Obviously, if one measure of outcome is the number of visits, the cost per visit will be higher than in any system where paramedical personnel can appropriately be used to extend care to a given population.

FHC also examined our charge that the outcome of all projects initiated with the assistance of USAID would have future comparative, and hopefully replicative, value. The information documented from these projects must provide

critical data for future health service resource allocation. It would be presumptuous, therefore, on the part of consultants to suggest definitive answers at this point in time on what strategy will achieve the most desired service outcome. Rather, it was concluded that in suggesting a series of demonstration projects, one would also have to consider a method of examining their production and propose a process by which the information derived will assist in the future formulation of policy and resource allocation.

Because of realistic economic constraints and priorities in Korea, FHC opted a basic approach: examination of the delivery of health services in institutional, organized settings in terms of production units.

The model can be illustrated as follows:




The objective of any production unit, whether it be the manufacture of transistors or the delivery of health services, is to provide consistent, or equivalent, high

quality unit products or services at the lowest possible cost.

When applying this principle to health service delivery, a number of key factors or independent variables critically affect production. For example, in all health delivery systems the cost and utilization of physicians' time are critical factors. The cost and utilization of a hospital bed is another.

In any social service system the outcome (service production) is difficult to measure. Comparisons of production between health service systems is even more difficult. In many instances, the data required to make the appropriate comparative analysis is onerous to determine.

However, service outcomes can be measured with various degrees of precision in terms of:

1. Quality of clinical or preventive services--therefore, skill of M.D. or health professional
2. Satisfaction of the users with the services provided
3. Utilization and unit cost of services rendered
4. Reduction of morbidity and mortality.

FHC constructed a conceptual model in which it could examine the existing Korean delivery system and in so doing determine gross values for the key dependent variables affecting service outcome. These variables were categorized

into several main groups:

1. The population group or groups being served by:
   a. geographic location or market
   b. employer status
   c. income
   d. method and level of charging and/or reimbursement for services provided
   e. capital financing of health facilities
   f. institutional affiliation, e.g., members of the National Agriculture Cooperative Federation
   g. Korean values and behavioral patterns related to the utilization of medical services
   h. medical insurance coverage organization

2. The sponsorship, organization, structure, and and administration of the delivery components.
   a. the primary care facility or facilities
   b. secondary or specialty consultation and referral
   c. hospital in-patient services
   d. other institutional forms of care
      (1) mental health
      (2) preventive services; TB, Family Planning, etc.

Once gross value is established from existing information, some assessment of the production for existing delivery systems can be made.

FHC recognized from the onset the pitfalls and difficulties in formulating any definitive conclusions using this approach. The team feels, however, that the approach will allow a basis for future refinement, thus leading to improved future resource allocations.

## B. LOW COST HEALTH DELIVERY SYSTEM

Part of FHC's charge by USAID is to attempt to identify within the Korean health sector two to three pilot projects which, if implemented successfully, will shed some light on how health services can be delivered in Korea at low cost. It is important to define what is meant by low cost. Does it mean the low cost purchase of health insurance? Or, does it mean the ability to deliver equivalent units of service at lower cost? For example, does it mean the ability to deliver an out-patient visit resulting in the same or equivalent product at the lowest cost possible? Does it mean limiting the service benefits to a level that is marketable to various population groups?

For the purpose of this analysis, FHC began with the premise that the potential cost of health services can be almost infinite in any society. The state of technology is such that an extremely broad and sophisticated range of costly services are now potentially available to any population group. If one accepts this premise, then lower (limiting) cost can only be achieved through the following mechanisms:

1. Limiting resource allocations so that the most expensive forms of care are not generally available in optimum supply. This requires allocating "service" resources to the population in a way which optimizes

utilization. It involves extremely tight central regulatory monitoring and capital investment controls by government, such as in England. Korean physicians are becoming more and more specialized, requiring more and more expensive resources to deliver their "unit" of service. If a cobalt therapy machine is installed at one medical center, the highly trained and specialized radiologists at four other centers will seek the same thing or a "newer model". Once in oversupply, the unit cost of charge for the service begins to accelerate.

2. Traditionally, effective demand is related to the ability to offer payments for services. Private sector capital investments are made dependent effective on consumer demand and the ability to pay. Effective demand is expanded more by control of the providers than decisions of patients. The available cash resources for health services, often pooled through insurance, are then captured to pay for the more expensive services at higher units of cost.

3. Another method of cost reduction is in the unit cost of service provided. As in any other production unit that is labor intensive, this can mainly be done by the successful performance of essential tasks by the least costly labor. If the system is totally dependent on the physician manpower to perform most of the tasks,

then the unit cost will be higher. If the tasks can be performed equally without diminishing quality by less costly personnel, then the unit cost will be reduced. The legal constraints in Korea on the use of paramedical personnel in organized health service delivery systems currently inhibits this development.

4. Still another method of cost reduction is to optimally utilize existing resources. If a physician is salaried in a system and is only seeing one-half of the number of patients on an average that he is potentially able to, then the unit cost for the physician visit is double. A system where the demand for services is at the saturation point is the most efficient. Further, demand will often allow delegation of tasks to less costly personnel.

C. MANPOWER

The numbers projected by Koreans for their future health manpower needs has been determined by ascertaining the ratios of the subject skills to populations in other countries, and then selecting an appropriate ratio level as the Korean national target. FHC is unaware of an attempt to develop a manpower needs model against a set of health care goals for the country.

Such an effort is extremely difficult because such an inquiry deals with questions of priorities, trade-offs between costs and benefits. Another approach is to view the question of manpower needs from an assumption of stretching whatever resources are available (or can be afforded) among as many people as possible. Dr. John Sibley in the Koje-do proposal for primary care estimates manpower needs at a professional staffing of one physician plus 20 staff for every 30,000 persons. Critical to this paid staff ratio are volunteer nurse assistants who, after a four to eight week training course, work at the community level in the ratio of one volunteer to 400 people. Thus, for 30,000 people about 75 volunteers are required.

In contrast to Sibley's estimate, the stateside Kaiser[2] system (noted for its cost consciousness) employs approximately 15 physicians plus 80 full-time persons to meet the ambulatory needs of 30,000 persons.

Sibley's proposal (some details of which are included in Appendix A) includes as the goal of the second stage the training of pharmacists to become part of the "team". FHC estimates Sibley's proposal would cost, excluding drugs,

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2 Kaiser International has a totally different manpower constellation applicable to overseas projects. This is commented on elsewhere in the paper.

somewhere between ₩ 1,000 - ₩ 1,100 per person per year for primary care. This cost includes a 10-year amortization of building and equipment.

Neither the Kaiser nor Sibley manpower constellations spring out of a list of problems. However, both approaches lend themselves to data reporting and thus, yield information which is essential for future planning.

FHC has commented at length on the Sibley proposal because the current Korean health manpower pool exceeds his suggested needs. When the Sibley formula is used for a 1986 population, 85,000 full-time health persons for primary care are required. The Korean 1986 projected estimate of doctors, dentists, nurses, pharmacists, and skilled medical auxiliaries (x-ray, lab, et al) is approximately 145,000. On the other hand, a projection of a U. S. Kaiser pattern to cover the nation's needs would reveal shortages.

The Sibley proposal for Koje-do points in the direction of maximizing manpower, operating an extended, stretching system, and looking at priorities. It requires the application of rigorous cost analyses in determining the most efficient employment of the system to maximize outcomes..

D. VALUES

The health staffs with whom FHC met are data oriented. However, it is through social value prisms that this data is analyzed and employed. The critical factor among those values is the relationship of health issues to national priorities.

The process by which most values move into importance in Korea is very much a matter determined by the national administration. It has been an economic prism through which goals have been established and priorities set. It is within an economic framework, plus of course political considerations of acceptance, that other decisions have ensued involving rural-urban priorities, capital allocation between social services and industrial development, etc.

Although economic objectives have been primary, the country has begun to articulate social service goals, as witnessed by the enactment of Social Security and related legislation. Yet, these legislative activities, while addressed to social issues, deal primarily with the economics of them. Further, for example, the pension legislation provides a vehicle for absorbing purchasing power and creating a pool for capital investment. Obviously, the current national leadership decisional framework is that social expenditures, including health services, will most likely enjoy responsive ears if the proposals for health

care investments demonstrate cost effectiveness and utility to larger economic aims.

In this connection, failure to address health issues as they relate to economic plans and objectives may lock into place a health delivery and financing system which over the next decade will cause a drag on economic goals and ultimately interfere with their realization.

The lack of importance attributed to health by the national government is dramatically demonstrated by the fact that 1.6 percent of the national budget is allocated to health and social welfare. Per family health expenditures are listed under "miscellaneous"--which includes transportation, recreation, stationery, cigarettes, and educational expenses--in the EPB Korea Statistical Yearbook, 1973.

E. EQUITY

The impact of health issues on national economic plans must be viewed against a backdrop of demand for equity. This demand, from a consumer viewpoint, was articulated about matters concerning availability of health resources for rural areas, cost, and quality. Not once did FHC hear any suggestion that health care delivery should be based on the ability to pay. In fact, one spokesman of a cooperative suggested that the Korean Government should

invest in a delivery model serving the poorest. As the national economic goals become realized, expectations about health care services will have a minimum floor. Nowhere did the team hear a denial of the need to address health because of other problems.

The growth of and demand for equity in health care services is a concomitant of economic development: when a major step in the economic ladder is reached, the people will expect it to bring them a level of fairness on health care accessibility, availability, and cost.

F. PUBLIC/PRIVATE INVOLVEMENT

While some vested interests were detected in preserving traditional roles in government and private enterprise, there was an obvious lack of rigidity to these positions. They both evidenced a pragmatism and a readiness to adapt to new roles if change was demonstrably superior. No ideological hang-ups were uncovered.

Considerable interest was sensed in joint or divided responsibilities, and that these roles would become defined through the development of shared data. The Government maintains an openess concerning change. FHC felt that the Government was committed to private sector capital investment, and would be willing to examine total operation of all health services by the private sector.

G. RELATIONSHIP OF PROFESSIONALS TO SYSTEMS

The team has not been able to assess in detail the Korean professional attitudes about their relationship to the current and/or changed system. Such evidence as there is in the literature suggests that the academic community is supportive of experimentation, studies, and change. Vested interests, power concerns, and the like undoubtedly exist, but the opposite is articulated. It suggests that support for change is present.

Government-employed professionals with whom FHC spoke are more defensive of practices and were skeptical about the reality of achieving change. Again, in every instance, however, there was a recognition of the need for change. FHC found no antagonism toward the idea of developing an economic enterprise within the health delivery system. Beyond the walls of academia, the team heard two physicians separately describe health delivery systems which incorporated maximum use of paramedics and concepts of total patient care. University support is essential to developing changes in the system.

H. COMMERCIAL MANAGEMENT

Industrial sources with whom FHC spoke saw their role as buyers and negotiators for services. The idea of contracting for professional management of facilities--

particularly those owned by the Government, and possibly lay management of health systems (by nonphysicians), was viewed with some skepticism. The idea of subcenter (Myon) decisions to be made by involvement of the population to whom services are provided was identified immediately with cooperatives (NACF).

There was recognition that the "management" of health needs was not being systematically met. People orchestrated the meeting of their health needs by employing a variety of resources--either because of economic constraints, custom or educational level. However, it was interesting to note that in an industry-sponsored facility, the employees were using the resources at a rate which suggested active preference for the industrial resource. Further, this partiality for the industrial system extended to employees' acceptance of recommended referrals.

## I. FINANCING

From discussions and readings, there was little evidence to suggest a Korean appreciation of how an investment in health care services is a strategy which can produce an economic and social yield--nor, was there any sensitivity to the economic costs of ill-health or unhealthy conditions.

While there was ready acceptance of an average cost per person, even though certain age groupings might require more use of resources, there was no similar acceptance of averaging costs for families. At no time in the meetings was the matter of the smaller family unit assuming a greater portion of the costs of services for the larger size families raised.

FHC suggested the concept of experience rating for communities. In this, communities would benefit from the savings against budgeted allocations resulting from measures it instituted to reduce needs for more costly health services. These ideas were easily and comfortably accepted.

The consultant team was struck with the absence of depreciation funding, amortization, capital funding, and similar accounting techniques. When this was pointed out, there was acceptance that such techniques may contain worthwhile elements for revising current costs analyses.

## II. INSURANCE SCHEMES

The Korean "Medical Insurance Law", promulgated in 1963 and revised in 1970, is the basis for the operation of five pilot insurance programs, three of which are operated by private industrial corporations and two by nonprofit community organizations. Table 1 on the next page describes these plans in terms of persons covered, financing, and benefit mechanisms. (Two other plans were in the process of final approval during the FHC's team visit: Koje-do and the Chunseong Medical Cooperative affiliated with Seoul National University.)

The Ministry of Health and Social Affairs is charged with the administration and subsidization of these programs. The subsidization budget for 1974 is:

| | | |
|---|---|---|
| Total Budget | ₩ 16,200,000 | ($41,013) |
| Approved | ₩ 11,940,000 | ($30,222) |
| Balance | ₩ 4,260,000 | ($10,791) |

As noted in Table 2, there are 15 Korean Blue Cross (BC) plans covering 52,800 persons. Of these approximately 25,000 persons enrolled in the Pusan and Okgu Blue Cross programs are recognized by the Government and receive a national subsidy. The other BC programs are operating outside the Medical Insurance Law. Apparently, this is due to the inability of the Korean Blue Cross to establish a Reserve

TABLE 1

STATUS OF PILOT MEDICAL INSURANCE CO-OP

| | Employee's Co-op | | | Self-Operated Co-Op | | |
|---|---|---|---|---|---|---|
| | Korea Chemical Co. | Pong Myong Mine | Korea Oil Co. | Pusan Blue Cross | Okgu Blue Cross | Total |
| Date of Establishment | 9/25/65 | 3/4/66 | 7/12/73 | 7/29/69 | 10/10/73 | |
| Persons Covered: | | | | | | |
| Member | 747 | 531 | 1,530 | 3,300 | 2,300 | 8,408 |
| Dependent | 2,690 | 1,872 | 3,250 | 11,550 | 6,900 | 26,262 |
| Total | 3,437 | 2,403 | 4,780 | 14,850 | 9,200 | 34,670 |
| Financial: | | | | | | |
| Premium: Member | 1.5% of salary | 1.5% of salary | ₩400/member ₩200 depend. | ₩200/head | ₩100/head | |
| Employer | " | " | " | | | |
| National Subsidy | ₩1,057,000 | ₩563,000 | ₩1,925,000 | ₩4,690,000 | ₩3,075,000 | ₩11,940,00 |
| Benefits: | | | | | | |
| Medical Treatment - Member | 80% | 80% | 60% | 70% | 60% | |
| - Dependent | 60% | 60% | 40% | 60% | 60% | |
| Delivery - Member | ₩1,500 | ₩10,000 | ₩50,000 | ₩2,000 | ₩4,000 | |
| - Dependent | " | 5,000 | 30,000 | " | " | |
| Funeral or ceremony - Member | ₩5,000 | ₩20,000 | ₩50,000 | ₩5,000 | ₩5,000 | |
| - Dependent | ₩3,000 | ₩10,000 | ₩30,000 | ₩3,000 | ₩3,000 | |

Source: Office of Annuity Planning, Ministry of Health

TABLE 2

BLUE CROSS

KOREA MEDICAL COOPERATIVE LEAGUE

| Blue Cross Program | Date Begun | Enrollment as of May 21, 1974 |
|---|---|---|
| Cheju-Do | 1972 | 3,000 |
| Chun Joo | 1973 | 2,000 |
| Chun Sung | 1973 | 2,000 |
| Dai Chon | 1972 | 1,000 |
| Dong Hai | 1974 | 2,000 |
| Dai Han | 1965 | 2,500 |
| Hyep Seng | 1974 | 2,500 |
| Inchon | 1972 | 1,500 |
| Kwangju | 1972 | 1,000 |
| Koje-Do | | 3,000 |
| Okgu | 1973 | 10,000 |
| Pusan | 1968 | 15,000 |
| Seoul - Han Kook | 1970 | 4,000 |
| Suwon | 1972 | 1,300 |
| Tai Ku | 1972 | 2,000 |
| Total | | 52,800 |

Source: Blue Cross Korea Medical Cooperative League

Fund as required by the Ministry of Finance. Private business corporations in Korea have expressed a desire to join Blue Cross, but have been dissuaded from doing so by the Government until such a Fund is set and sanctioned by the Ministry. Although it is not entirely legal for the Korean Blue Cross to operate at this time, it is not illegal either. That is, since the association is attempting to establish a Reserve Fund and as long as they have an active application with the Ministry, their operation is not considered illegal. And, while the Okgu Blue Cross uses that designation, it does not consider itself a member of the Korean Blue Cross league, though the league lists it as such. The three other recognized programs under the law enroll only their own employees. Approximately 10,600 employees are covered under these programs.

The health insurance law is concerned with the financing of health care services. The legislation does state that an Insurance Medical Treatment Agency must be recognized to provide services, and that a "Medical Person" is one employed by the Agency. ("Medical Persons" include pharmacists.) The approach of the legislation is to establish a floor on contributions to the scheme of two percent of income, but to permit as much as an eight percent contribution.

The fundamental strategy is to require employers to form medical insurance corporations which then have to contract

with Insurance Medical Treatment Agencies. Contributions from employees may be required, but are in effect for everyone only when over 51 percent of the employees elect to participate. Although the Government legislation mandated an industrial program upon a 51 percent decision of the employees, the Korean Oil Company required 65 percent.

The Seoul Han Kook Medical Cooperative has contracts with nine hospitals; most other community (Blue Cross) programs are far more limited and usually relate to only one institution. However, the employers-developed Medical Benefits Association, covering 4,780 workers and dependents, has arrangements in various parts of the country: two hospitals in Seoul, two in Pusan and Taegu, one in Choon Chun, two in Kunsan, one in Taejon, two in Masan, and Chosun University.

In general, the employer health benefit programs are superior in: (1) benefits, (2) incentives to appropriate use, (3) underwriting rules, and (4) management, to the Blue Cross programs.

The Blue Cross programs, which have no relationship to the Blue Plans of the U. S., are, for the most part, aiming at a poverty-individually enrolled population. As noted in Section A, it appears that these programs are headed for difficulty.

Part of the difficulty of the community programs is resistance by Koreans to enrolling for insurance. It derives from the time when insurance was compulsory during the Japanese occupation.

Questions concerning marketing the health programs brought out the difficulties faced in Korea--economic, historical, behavioral, etc. On the other hand, American International Underwriters, Ltd., a commercial carrier in Seoul, complains that although it believes there is a market, it has been prohibited from selling health insurance.

FHC is convinced group enrollment is possible and that the market will participate if an attractive program is presented. To enhance market success, attention should be given to a strategy which drops the "health insurance" approach and sells programs where buyers have exchanged "premiums" for certain services for which coupons or chits have been provided. These "entitled purchases" would be geared to the age of the recipient and be tied into health care efforts. Thus, one or two chits might be for parasite testing, etc.

In addition to market problems, another difficulty facing carriers revolves around a poorly conceived insurance law. The Ministry of Health, which must discharge a responsibility for administering the insurance schemes and monitoring health care, is placed in a bureaucratically compromising

and conflicting position. The law does not require any actuarial basis for insurance programs. In the absence of administration, and unless proper safeguards are soon undertaken, the more successful the Blue Cross Plans become, the more likely they are to fail. At the present time they benefit from hospital support and financing, ignorance of benefits, and newness of the program. Okgu's Blue Cross program lost an approximate average of ₩ 858 per household in 1973.

The major problems, however, have less to do with the law's inadequacies than with the unguided directions the system may take. Very little in the benefit structure and premium cost encourages labor intensive efforts or the more efficient use of technology.

Coordinated, nationwide insurance initiatives, actuarially sound, developed against a backdrop of supportive legislation, with incremental industrial and organized agriculture enrollment participation, offers far more promise than the struggling community efforts. The insurance schemes should be thought of hand-in-glove with health delivery questions. Fragmented, separate expenditures for health care services by industry, private sector, and Government is uneconomical and wasteful. Last year over 500,000 hospital days were used for TB patients, and 2,000 workers were employed for TB control. Were a health system more fully in place, it

would have been expected that TB hospital beds would not now exist. At a per day cost of $9.00[3] for hospitalization, Korea is losing $4,500.000 annually. Nothing in the management of an insurance program, nor its underwriting, would reduce this cost unless the insurance program is tied to delivery and support of rational systems.

FHC tested this thought and found general acceptance and statistical support: Were the current spectrum of capabilities more appropriately employed; were expenditures maintained at the same level (but selective investments made); and were relationships, protocols, and procedures established among all providers, the current Korean manpower could support the health system with significant enhancement in both quantity of services and quality.

Insurance tied to delivery must consider that patients tend to first see pharmacists when they feel ill. The problem of compensating pharmacists when drugs may not be prescribed, and how to incorporate them into both delivery and insurance schemes, remains unresolved. The cost of insurance is tied to the level of charges. The spirit of entrepreneurship should not be stifled: the problem is to try to assist providers in developing systems which increase incomes while not increasing rates to patients. Actually, an increase in volume reduces per patient costs and lowers premiums.

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[3] Theoretically derived from the cost model, Appendix A.

In part, it was the need to provide both industrial health services and out-of-plant care which spawned Kaiser Health Services and led to a program of prepaid group practice. Kaiser International, in an interview with FHC, stated it has demonstrated in Africa that it can deliver comprehensive care and hospital services at an annual expenditure of about $400,000 for 15-20,000 persons. Insurance development tied to delivery must consider industrial health issues and legislation. For example, th cost for semiannual health examinations may not be worth the yield against providing out-of-plant services through insurance. Support of insurance requires an openess about existing legislation.

A. COMPARATIVE ANALYSIS OF APPROVED PLANS

Table 3, Distribution by Percentages of Payment and Visits Between Out-Patient and In-Patient in the Five Approved Plans, contains further support for the prediction that the trend is moving toward a greater employment of the hospital. Note the Korea Oil Company's (KOCO) distribution of cases and costs between out-patient and in-patient. It has the highest percentage of cases treated in the hospital--one-third higher than the next closest plan, Pong Myong Mine. Korea Oil Company has a young age group and provides up to ₩ 3,000 per day for in-hospital care. It would appear that

TABLE 3

DISTRIBUTION BY PERCENTAGES OF PAYMENT AND VISITS BETWEEN OUTPATIENT AND INPATIENT IN THE FIVE APPROVED PLANS

| | IPD | | OPD | |
|---|---|---|---|---|
| | % Won | % No. Visits | % Won | % No. Visits |
| Korea Chemical Company | 33.4% | (1.7%) | 66.6% | (98.3%) |
| Pong Myong Mine | 26.3% | (2.6%) | 73.7% | (97.4%) |
| Korea Oil Chemical | 33.6% | (3.7%) | 66.4% | (96.3%) |
| Okgu Blue Cross | 35.1% | (2.2%) | 64.9% | (97.8%) |
| Pusan Blue Cross | 13.2% | (1.9%) | 86.8% | (98.1%) |

Source: Annuity Planning Division, MHSA - May 22, 1974

Korea Oil Company employees are being hospitalized in part because of high level of benefits. (Certainly from the limited data no judgment can be validly made as to the merits and national import of this highly interesting statistic. But, it does tend to confirm the expectation that when patients and physicians are aware of a hospital service benefit, more hospitalization occurs.)

Table 4, Ratio of Charges Paid by Plan in Relation to Patient Payment, suggests from the limited information available that patients with relatively good income participating in a plan paying well in one cost center (hospital) shift and increase their expenditures elsewhere (OPD). Experience in the U. S. has demonstrated that when complete health services are covered for payments, patients shift and invest their health dollars into dental services.

Table 5 takes a look at distribution of charges. When hospitals discount bills, the discounting merely shifts costs, and if 100 percent of the population was covered, no discounts would be possible. A carrier is entitled to a discount to the extent it reduces hospital collection, bad debt, and administrative costs, as well as if it assists in reducing interest charges to meet cash flow. But, evidence shows a pattern of hospital financing for the plans which simply guarantees that when the Plan grows sufficiently large to make an impact on the hospital census

TABLE 4

RATIO OF CHARGES PAID BY

PLAN IN RELATION TO PATIENT PAYMENT

| | Plan Paid | Patient Paid | Hospital Dis. |
|---|---|---|---|
| Pong Myong Mine | 64% | 36% | |
| Korea Oil Company | 70% | 30% | |
| Korea Chemical Company | 48% | 52% | |
| Okgu Blue Cross | 65% | 35% | (Hospital discounting rate ranged from 15-20%) |
| Pusan Blue Cross | 75% | 25% | |

TABLE 5

DISTRIBUTION OF CHARGES

AMONG PLAN, PATIENT AND HOSPITAL

| | Plan | Patient | Hospital |
|---|---|---|---|
| Korea Oil Company | 41% | 44% | 15% |
| Okgu Blue Cross | 58% | 31% | 11% |
| Pusan Blue Cross | 48% | 16% | 36% |

that insurance rates will have to rise, even if hospital costs remained static.

Table 6 illustrates the benefits provided covered persons by four of the six approved MHSA programs. While the programs have certain common characteristics, their differences are major. These differences confirm FHC's concern that without a central, ongoing coordination and study of the impact of the insurance on costs, major new levels of expenditures can be set into motion, or savings lost.

Notwithstanding the FHC criticisms about what had developed in the United States, the mistakes were made incrementally one by one. In the U. S. the first insuranc programs dealt with hospital insurance, than in-hospital surgery, then extended to dependents, and so on. Korea is moving into a comprehensive coverage quickly, not only in terms of benefit range but also dependency coverage.

# TABLE 6

| BENEFITS | KOREA OIL CO. | | | | OKGU BLUE CROSS | | | | CHUNCHEON BLUE CROSS | | | | PUSAN BLUE CROSS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Member | | Dependent | | Member | | Dependent | | Member | | Dependent | | Member | | Dependent | |
| | Covered | Amount | Covered | Amount | Covered | Amount | Covered | Amount | Covered | Amount | Covered | Amount | Covered | Amount | Covered | Amount |
| Normal Maternity | X | ₩50,000 | X | ₩50,000 | X | 30% BC 19% Hosp. | X | 30% BC 19% Hosp | X | 60% | X | 60% | X | 2,000 | X | 2,000 |
| Abortion | X | ₩30,000 | X | ₩30,000 | - | - | - | - | - | - | - | - | - | - | - | - |
| Caesarean | X | ₩50,000 | X | ₩50,000 | X | 30% BC 19% Hosp. | X | 30% BC 19% Hosp | X | 60% | X | 60% | X | 2,000 | X | 2,000 |
| Medical | X | Emergency only 60% | X | Emergency only 60% | X | 42% BC 21% Hosp. | X | 42% BC 21% Hosp | X | 90% | X | 90% | X | 50%* | X | 50%* |
| Examination | X | 60% | X | 40% | X | " | X | " | X | 90% | X | 90% | X | 50%* | X | 50%* |
| Drugs | X | 60% | X | 40% | X | " | X | " | X | 90% | X | 90% | | 50%* | X | 50%* |
| X-ray, Lab | X | 60% | X | 40% | X | " | X | " | X | 90% | X | 90% | X | 50%* | X | 50%* |
| Surgery | X | 60% | X | 40% | X | 30% BC 19% Hosp. | X | 30% BC 19% Hosp. | X | | X | 90% | X | 20%** | X | 20%** |
| Hospitalization | X | ₩3,000 P/D | X | ₩3,000 P/D | X | 41% BC 10% Hosp. | X | 41% BC 10% Hosp | X | 70% | X | 70% | X | 20% BC 50% Hosp. | X | 20% B 50% H |
| No. of days maximum | | 120 | | 120 | | | | | | | | | | | | |
| Death | X | ₩50,000 | X | ₩30,000 | | | | | X | ₩5,000 | X | ₩5,000 | X | ₩5,000 | X | ₩3,000 |
| Maximum Total Benefits | X | $480,000 p/y | X | ₩360,000 p/y | | | | | | | | | | | | |
| Exclusions (Major) | | | | | | | | | | | | | | | | |
| Use of other providers | X | | X | | | | | | X | | X | | | | | |
| Appliances | X | | X | | | | | | X | | X | | | | | |
| Emergency | | | | | | | | | | | | | | | | |
| Conversion | X | | X | | | | | | X | | X | | | | | |
| Pre-existing conditions | X | | X | | | | | | X* | | X* | | | | | |
| Coordination of Benefits | X | | X | | | | | | | | | | | | | |

*30% allowed by BC for certain services

*30% allowed by BC for certain services

*50% paid by hospital
50% paid by Blue Cross
**30% Patient
50% hospital

## III. EXAMINATION OF THE EXISTING SYSTEM AGAINST THREE CRITERIA

The FHC team applied three criteria: a Financial, Management, and Provider Capability against the present health system in Korea to determine in a gross manner its institutional structure and capacity. These criteria assisted the team in reaching its conclusions and making its basic recommendation.

### A. FINANCIAL CAPABILITY

An essential question in financial capability is what are the people willing to allocate for health services and is this enough. The traditional answer elsewhere has meant that no matter how much has been allocated, health services has always found a means of absorbing resources very quickly and of creating another round of economic shortages.

Given the obvious Korean constraints and the lessons learned in the United States and elsewhere, FHC states the question differently: What are the people willing to allocate for health services and, given that, how do you design a system to maximize the investment?

Purchasing Power: Once again the question posed must be: To buy what goods and services? At what prices? Under what system?

Korea cannot afford and must avoid forces which begin to cut too rapidly into the GNP for health services. She must tightly direct, focus, and allocate her energies and resources to those health areas where failure to do so is costing her more now than the price of care--and she must shift within health care cost centers allocations to the highest yield priorities. Korea must determine where she is going and how she can get the best possible buy for an increased expenditure.

FHC tested leadership's insight into a level of per capita expenditure in rural areas which would cover 85 percent of that population. The general response was about ₩200-₩250 per person per month. Clearly, contributions related to income might yield a higher per person average.

Hospital expenditures must be limited for the foreseeable future. Koreans should continue to have children at home (and home care services improved), but high-risk cases should be hospitalized. The current pattern of insurance benefits is leading to pressures for hospital maternity services. The application of the Korean Oil Company formula to the country would mean each person would annually spend ₩ 1,350, assuming a birth rate of 27/1,000 (KOCO maternity benefit ₩ 50,000 x 27/1,000 = ₩ 1,350). Projections for personal health care expenditures must be added to public health expenditures. FHC does not have enough data

to make these judgments. But, the team knows enough from the data to determine that patterns of western delivery and insurance approaches built on them cannot be sustained even at the substantially lower incomes for health care personnel.

Korea can develop a capability, which when exercised within current expenditures for health services, will considerably improve the quality of life through more rational and coordinated delivery. Additional increments of expenditure to achieve further maximization will continue to raise the health level of the population. Such a capability will be concerned with much more than personal health services. More is contributed to better health by a full stomach than a comprehensive complement of health resources serving empty stomachs.

The Korean accounting pattern has been to exclude capital costs and equipment as a factor in charges. In the analyses which must be undertaken to determine prices at a micro level, depreciation and amortization should be a factor. Including the cost of such amortization in charges may increase rates such as to deny cost effectiveness. Government might assist through loan guarantees to lower the interest rate.

## B. MANAGEMENT CAPABILITY

In analyzing management capability within a health delivery system, one must recognize that as in any complex business there are a number of skill levels and functions subsumed under "Management Capability". These skills range from conceptualizing and planning to efficiently running subsystems, i.e., telephone answering services, scheduling arrangements, etc. Everything FHC has seen in Korea convinces the team that Korea possesses those skills, but in many instances they must be transferred and employed in the health delivery system.

### 1. Public (Government) vs. Private

The public and private sectors require managerial talents and strengths. Failure to attach importance to each--and to make certain that public and private employment is competitive--is a mistake. Training programs should address themselves to management talent in both sectors to encourage cross fertilization.

### 2. Ownership - Private vs. Public (Nongovernment)

The distinctions are much more blurred between managerial talent within these two groupings. Associations and exchanges between these groups should be encouraged: the administrator from the "nonprofit" articulates the principles of virtues, and the administrator of the

profit operation makes him prove where cost utility can be found.

As far as could be determined, there is no vehicle for the kind of continuing exchanges among management capabilities. Once again, the team's discussions impressed FHC with the level of skills present in Korea.

3. Institutional Structure

Korea has a plethora of talent which exists within the health establishment, or is transferrable to it from related efforts, such as the National Agricultural Cooperative Federation, etc. FHC did not discover within the delivery system an analytical component to complement its managerial capability.

It is not essential that management of health delivery systems require heavy training in health issues. It is essential, though, to have management which understands process, which appreciates the need for external review and evaluation, and which establishes a model for its operation. FHC has been extremely impressed with the managerial, executive, and analytical capabilities organized at the national levels to address economic issues. These skills should be employed to look at health care matters at the micro level.

4. Demand and Use

The psychological set employed by managers of the health system is to try and increase demand, raise the level of use, collect more Won, and keep costs down to yield a good return; e.g., hospital managers, therefore, are interested in extending the number of days per case. From a national planning viewpoint, it is essential for health management to adopt a different psychological set which is based on lowering individual demand while increasing overall demand by expanding the population base. Though this lowers per person use over a wider population, it still maximally exploits facilities and personnel. This results in a more effective deployment of resources and a lower per person cost. Though this change represents a turnaround in the system, it can be done.

C. PROVIDER CAPABILITY

A basic division between Western and Eastern orientations occurs in the provider groups in the Korean health care delivery systems. The Western-oriented system includes the physicians with their specializations and boards, but also, pharmacists, druggists, nurses, dentists, x-ray, laboratory, and other technicians. The Eastern-oriented system consists of the herbalists, acupuncturists,

shamans, bone setters, et. al., among its providers. The majority of Koreans seek initial services from Western-oriented care sources, principally pharmacists. However, FHC was consistently informed that patients orchestrate between Western and Eastern sources in trying to meet their needs. Within the Western focus, the primacy of drugs is underscored by a general acceptance of counting days for which medications are prescribed as "days of treatment". If no drugs are ordered, the visit of the patient goes unrecorded.

Quantitatively, the "resources" of Western medicine available to Koreans far outweigh those of Eastern orientation. In 1972 there was one pharmacist for 1,882 persons compared to one licensed herb doctor for every 9,132 persons; one physician for 1,852 persons as contrasted with one licensed acupuncturist for nearly 150,000 persons.

The incidence of utilization is not known, but it is reasonable to assume that the employment of Western resources is higher, and that Eastern practitioners are disproportionately used in relation to their numbers. In examining resources then, Eastern-oriented capabilities cannot be ignored. However, major focus has to be among Western-trained dispensers of services.

Both Eastern and Western resources are skewed in their distribution between urban and rural areas, affluence

and poverty, with dentists being most skewed to urban areas. In general, the same pattern among Eastern resources exists as with Western, i.e., skewed to the cities. Thus, both dentists and herb doctors have about 50 percent of their registered numbers in Seoul and Pusan.

To determine what is an adequate number of professionals is obviously a function of many variables: environmental conditions, nutritional patterns, population patterns, urbanization rate, level of public awareness, self-care, educational levels, etc. Korea has an educational level which allows major public health measures and gives promise that there could be realized, through time, appropriate employment of professional services. In general, if public health activities occur, FHC sees an adequate supply of professionally trained persons in Korea with an appropriate, if not overly ambitious, growth rate. The problem is to maximize the employment of skills by: (1) continuing and expanding public health approaches, and (2) integration of skills among all professionals, Western and Eastern.

The hospitalization rate among Koreans is approximately 93 days per 1,000 persons compared to the average prepaid group practice program in the United States of about 500 days per 1,000 persons. It has been estimated[4] that approximately 50 percent of the 500 days in the U. S. might be "saved" by out-patient surgery, or two-day care

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[4] Discussions among administrators.

regimens under supervision and monitoring. Thus, in comparing actual Korean hospitalization and a theoretical best U. S. pattern, a significant difference is present. It does appear that Korea will have to engage in a hospital building program. However, to undertake construction now would be ill-advised. It is true that hospital facilities like manpower resources, are skewed to the urban areas. Yet, the correcting of skewed health manpower will not occur by building hospitals in rural areas. Moreover, careful planning and analysis, and the examination of innovative approaches must be undertaken before construction of capital facilities.

There is considerable concern expressed with regard to the low use of provincial hospitals. The problem of increasing employment of provincial hospital beds should be a primary strategy to get a handle on new construction needs.

Awareness that economic polarization might be developing around the issue of private vs. public hospitals caused the Government to require private hospitals to accept up to 30 percent public cases. Because of various pressures, this percentage is rumored to soon be reduced to 15 percent.

Since 1962, the number of hospitals having more than 20 beds increased from 152 to 260. Forty percent of these facilities are in Seoul and Pusan. Clinics during the same period increased 15 percent, but major shifts occurred among

licensed dispensaries, both industry and others. In 1962 these totalled 40 facilities; in 1971, 140 facilities (90 were in industry). But in 1972, the Ministry of Health and Social Affairs reports a total of 93 dispensaries, a drop of 18 in industry and 29 in others from the previous year. As the result of public policy, a major dimunition since 1962 has occurred among leprosy sanitaria, reducing the number from 43 to 6 in a 10-year period.

Against concerns for accessibility and availability, the major persistent and increasing problem is that 34 percent of the Myons, comprising 15.1 percent of the population, are without services of herb doctors, dentists or physicians. In general, since a 1965 high, there has been a gradual reduction of scarcity, although it is still about 50 percent more severe than the 1962 low.

# PREFACE

The notes contained herein are summary in nature and were kept as a log of Family Health Care interviews with institutions and individuals who contributed to the team's understanding of the problem. An attempt was made to record the substance of all conversations: no criticism is implied or intended in any individual case where the record reveals an adverse statement or observation on the part of those interview or the interviewers.

MEMORANDUM TO THE FILE

DATE: April 16, 1974

SUBJECT: Interview with Mr. Ting Yi Oei, Desk Officer for Korea, Peace Corps

I met today with Mr. Ting Yi Oei, Desk Officer for Korea, Peace Corps. Before his present assignment, Ting was a volunteer in Korea. I explained our assignment to him and asked if he would be willing to give us a briefing on the Korea Health Sector. He was agreeable to this and it was scheduled for April 23, 3:00 pm in FHC's office.

Ting said the largest Peace Corps program in health is in Korea with over 100 volunteers in the field. Up until a short time ago, most of the volunteers worked directly with the public sector (Ministry of Health) but recently, with the government's blessing, they have been shifted to the private sector through the Korea Tuberculosis Association. I asked Ting for any reading materials he might have on the current health projects in Korea. He gave me several recent reports and training documents which related to objectives of the Peace Corps program in Korea.

The Peace Corps/Seoul office is located in the Korean Educational Association Building, room 701.

MEMORANDUM FOR THE FILE

DATE: April 18, 1974

SUBJECT: Interview with Mr. Charles D. Gray, Deputy for Administration, and Mr. Jack Muth, Deputy for Field Activities, Asia-American Free Labor Institute

Ron Epstein and I met today with Mr. Charles D. Gray, Deputy for Administration, and Mr. Jack Muth, Deputy for Field Activities, Asia-American Free Labor Institute, 1775 K Street, N.W. The purpose of the meeting was to determine what activities their office was involved in that were relevant to the health sector in Korea. A representative of their office, Mr. Tom Miller, is stationed in Seoul. Through that office, some assistance has been limited to medical equipment in small quantities and to working with clinic administrators in attempting to have them set aside fixed sums of revenues for equipment replacement in the future.

We gave Mr. Gray a briefing of our assignment in Korea. He suggested we spend some time with Mr. Miller and that he would write the Seoul office and alert them to our impending visit.

MEMORANDUM FOR THE FILE

DATE: April 23, 1974

SUBJECT: Interview with Mr. Ted Davis, World Bank

I spoke with Ted Davis of the World Bank today to see if he could brief us before departure. He felt his knowledge of Korea was dated (he had been there once, two years ago) and was specifically based on their agricultural sector. For these reasons, he suggested David Lwos, Chief, Country Division, Korea. I have called his office (477-5735) to arrange this briefing.

Of particular importance, however, is Davis's work with the National Federation of Cooperatives in Korea. Next to Japan, he said this is the most highly structured, centralized, general purpose cooperative organization in the world. In fact, it is based on the Japanese model. As a symbol of its unity and strength, it has, for instance, a complete monopoly on all fertilizer production in Korea. Their national office is in Seoul and we should put them on our itinerary. Davis did agree to address this topic and that meeting is scheduled for May 1 at 4:00 pm in his office at 1801 G Street, room D-821. His phone number is EX 3-530

# MEMORANDUM FOR THE FILE

DATE: April 24, 1974

SUBJECT: Interview with Mr. Dan Morriarty, Director, World Extension Division, CUNA International

I spoke this morning with Dan Morriarty, Director, World Extension Division, CUNA International (Credit Union National Association), Madison, Wisconsin. He said the Credit Union movement in Korea is quite extensive and active in both the urban and rural sector. He suggested we contact the gentleman listed below once we arrive in Seoul. He is also one of the directors for the Asia Confederation of Credit Unions, so he could be helpful specifically to the Credit Union structure in Korea and generally to what is being developed in other parts of Asia. We are to use Morriarty's name when contacting Kang.

Mr. Augustine Kang
Manager
National Credit Union Federation
of Korea
Suhdae Moon, Box 8
Seoul, Korea
Tel. 32-3395 or 34-0983

# MEMORANDUM FOR THE FILE

DATE: April 24, 1974

SUBJECT: Interview with Mr. David Lwos, Country Division Chief for Korea, World Bank

Early this afternoon, I spoke with David Lwos, Country Division Chief for Korea at the World Bank. I explained our assignment to him and he agreed to meet with us on April 29 for a briefing on the Korean health sector. The time has been set tentatively for 3:00 or 4:00 pm that day, so I have blocked out both hours on your schedules until Lwos can confirm which hour he will actually be free.

MEMORANDUM FOR THE FILE

DATE: April 25, 1974

SUBJECT: Interview with Y. B. Rhee

Y. B. Rhee, who left Korea 17 years ago, gave us a briefing via phone from his HEW office on the Korean health sector as he knew it and as he understands it to be today. He described the education of physicians and other health professionals, the reasons for person shortages in rural areas, and the proliferation of "medical men" in urban centers. Mr. Rhee gave us the names below and suggested we contact them, using his name, once we arrive in Korea.

1. Byong Whie Lee, Ph.D.
   Director
   Bureau of Atomic Energy
   Ministry of Science and Technology
   Korean Government
   Seoul, Korea

2. Kyoung-Like Kim, M.D.
   Director, Institute for Rural Health
   Okku-gun, Cholla-Pukdo
   Kunsan, Korea
   Tele.: (Kunsan) 566-2166

3. Youn Choul Koo, M.D.
   Professor and Chairman
   Dept. of Preventive Medicine and Publ Health
   Medical College
   Director
   The University Health Service
   Ewha University
   Seoul, Korea

MEMORANDUM FOR THE FILE

DATE: April 26, 1974

SUBJECT: Interview with Mr. Jack Dublin, Director, AID Cooperative Office

Ron Epstein and I met this morning with Jack Dublin, Director of AID's Cooperative Office. We gave him a general outline of the project and mentioned that one specific task in the assignment was to look at cooperatives in Korea as one possible institution for the delivery of health care. Jack suggested that we contact the CUNA International Director in Madison, Wisconsin and get the name of the gentleman who was managing the National Credit Union Federation in Korea. (We had it.) After a general discussion on cooperatives, Jack said he would be interested in our findings, particularly as they relate to cooperatives. If we find a way in which his office could become involved in cooperatives/health care delivery, he would like us to bring this to his attention upon our return.

MEMORANDUM FOR THE FILE

DATE: April 26, 1974

SUBJECT: Interview with Mr. John Hurley, Office of the Foreign Secretary, National Academy of Sciences

I met today with John Hurley, Office of the Foreig Secretary, National Academy of Sciences. John handles Science and Technology programs of the Academy in Asia and will be in Korea toward the latter part of our assignment. John suggested we contract the following people using his name.

Mr. Lin Sloan
The Asia Foundation
c/o Sakandong
Chongno-Kw
Seoul, Korea
Tele.: 74-5195 or 74-2630

Dr. Lee Hahn Been
President
Soong Jun University
Seoul, Korea

Dr. Brester C. Denny
Dean, Graduate School of Public Affairs
University of Washington
Seattle, Washington
Tele.: (206) 543-4920
(Dr. Denny is on the Joint Committee on Scientific Cooperation, National Academy of Sciences, and coordinates his consultant activities at the Acade with the Ministry of Science and Technology, Korea.)

Also, John suggested we talk with the Assistant Program Officer, USAID, Dennis Barrett, 72-2601, ext. 4131, in Seoul.

# MEMORANDUM FOR THE FILE

DATE: April 29, 1974

SUBJECT: Interview with David Lwos, Country Division Chief for Korea, World Bank

I met this afternoon with David Lwos, Division Chief for Korea at the World Bank. David gave me a brief run through of the current economic situation in Korea, which was all very positive. As the discussion developed it turned out that he was very interested in our project and capability to carry it through. His office was not familiar with the health sector as they have not been involved in any such projects, but were trying to do something with paramedics. I understood this to be in an early stage of conceptualization. Further, he said they expected to get into the health sector and would be interested in talking with us about our findings when we return. David felt the Koreans were capable of doing most anything they put their minds to, and in that sense prepayment, insurance, cooperatives, group practice, etc. all seemed like ideas they could run with in the private sector. He then referred back to cooperatives and said he had not thought about using that mechanism to deliver medical care, but the idea sounded intriguing. He asked if the firm (FHC) was based in Washington and seemed pleased to see that it was.

He suggested we talk with the following people in Korea:

Dan McKinnis, UNDP (United Nations Development Plan)
Mr. Richard Niebuhr, World Bank Fund
Dr. Kim Mahn, Director, Korean Development Institute

He also suggested we check into the Saemol Movement which is a community development movement started in 1971 to increase off-farm incomes in rural areas through industrialization.

David said he was not free to give us a copy of the World Bank study on Korea for 1973, but a copy was in Seou and we could get it from the Mission Director, Mr. Alder. He recommended we read it. Again, he hopes we will debrie him when we return.

MEMORANDUM FOR THE FILE

DATE: April 29, 1974

SUBJECT: Interview with Blaine Richardson, Korea Desk Officer, Department of State

I met this morning with Blaine Richardson. The session began by his asking me what my impressions were of the project's objectives. He was evidently satisfied with the explanation, as he then set out to describe how this health project fit into the overall U.S. effort in Korea. He said there was a great deal of interest in State on this project in view of the fact that the AID mission was gradually closing down operations in Korea. State saw this program as being the "capstone" of USAID/Seoul's efforts in Korea during the past three decades and they wanted to get it started as soon as possible.

When we return, he would like to sit down with us for a debriefing. His number is 632-9084.

C-12

MEMORANDUM TO THE FILE

DATE: May 1, 1974

SUBJECT: Interview with Ted Davis, World Bank

I met with Ted Davis of the World Bank this afternoon to discuss the National Agricultural Cooperation Federation He said this is a highly structured, integrated co-op that operates on the policy of what is best for the country and not, as most cooperatives, on how to maximize benefits to its membership. It has close ties with the Government, i.e. the co-op's president is appointed by President Park, and the Government uses the co-op to keep consumer prices low.

In Seoul, we should contact: (use Ted's name)

Mr. Tal Chun Hong
Vice President
75 1-KA Choongjong Ro
Sudaemoon Ku
Tele: 73-0021, or 29

P.S. Ted also mentioned that the co-op has an insurance plan for its members, but he had no details on it.

MEMORANDUM FOR THE FILE

DATE: May 6, 1974

SUBJECT: Interview with Mr. Michael Adler, USAID/Seoul Mission Director

Mr. Adler cautioned us against attempting to apply standard urban-rural breakdowns to the Korean population, i.e., it is difficult to tell where one stops and the other begins. On the question of the "industrial estates" concept, he thought the whole country was evolving into one and that these estates would eventually grow into cities. One program he would like to see developed from the FHC study is an insurance scheme for the delivery of health services. He felt we would make no progress if our recommendations placed a tremendous cost burden on the ROKG. Overall, it was his opinion we were dealing in an area that presently offered more questions than answers. In any recommendation the FHC team makes, he thought we should find an institution that had the potential to learn as well as give of itself in the development of expanded health services to the Korean population.

C-14

MEMORANDUM FOR THE FILE

DATE: May 6, 1974

SUBJECT: Interview with Dr. William Davis, Assistant Director for Planning, USAID/Seoul

Dr. Davis said he believed the health program should be in the private sector. He felt that Koreans took their health seriously and were not crying out for governmental assistance on health care. He suggested we look into the new "village movement." It was his feeling that the pharmacist was the most active in the delivery of medical care, and that many health professionals go abroad because of the lack of opportunity to practice their specialities here. The ROKG presently has a program designed to attract more women to the ranks of health professionals and we were encouraged to look at this resource. Too, it was suggested that we look at the behavioral and environmental characteristics which determine why and how people get sick.

It was Dr. Davis's observation that Korea has a wealth of institutional resources. Competent fee charging facilities have good utilization patterns, and he suspects more people would use more services if they were made available. And, the private sector has been triggered by the ROKG through the 5-year development plans. He said the Koreans are highly disciplined and do well by themselves.

MEMORANDUM FOR THE FILE

DATE: May 6, 1974

SUBJECT: Interview with Dr. Dorothy Glenn, Chief, Population Planning, USAID/Seoul

Dr. Glenn gave us a quick overview of Korean medical practice. She felt the private sector delivery capability was more acceptable to Koreans, but was puzzled as to an explanation for this situation. Koreans follow this procedure for medical care: pharmacist, herbalist, M.D., hospital, and then home to die. The physician manpower supply is: 16,000 - 17,000 licensed M.D.s, but only some 8,000 are in active practice, mainly in Seoul. There are 1,200 female M.D.s. Presently, there is a program operating to move M.D.s into rural areas where they are needed. This is done through a mandatory 6-month service program for resident students. In any one year, some 900 residents are serving in rural areas, but it was her feeling that the program was not working too well.

MEMORANDUM FOR THE FILE

DATE: May 6, 1974

SUBJECT: Interview with Dr. Kim, Mahn Je, President, Korean Development Institute, and Dr. Bon, Ho Koo, Research Director

Dr. Kim mentioned that there has not been much research done in the health sector, though the Economic Planning Board is now discussing social development aspects of the next five year plan to begin in 1977. He felt that many Koreans think health care costs are to high and there are not enough facilities to handle their needs. Further, the ROKG is not an innovator--it responds to the needs of the people. When thinking about the health sector, many Korean planners have resource constraints in mind.

Dr. Kim said KDI works from endowments and their services are frequently utilized by the Economic Planning Board. It was his feeling that planners did not know of the many pieces that go into the "health puzzle," or of the economics of health care--"not many people here know much about health delivery." He views micro studies as a means to spread light to the macro level. He though KDI could get into operational systems but there was no budget for it this year. However, he would venture into the operational arena if he had a grant to do so. By the end of this year, he though Korea would know what kind of studies it had to do before formulating a health plan. Still, he feels apprehensive about moving into social planning and health, although he knows KDI has an evolving role to play in this area.

He was asked if it wouldn't be advisable to learn how the micro level works with capital assistance before attemptin to deal with the macro level. Dr. Kim mentioned KDI's work with the transportation sector. He could see the economics of that, but not health. Dr. Scheyer replied it was a difficult subject to handle if one did not consider health as an industry and in production terms. At the moment, health as an issue in Korea was relegated to Welfare concerns. Dr. Kim said the present health insurance scheme for civil service employees is so narrow in scope and benefits that actual payment to users is almost non-existent. He had the feeling that once the "medical box" was opened, it would turn into the proverbial Pandora's box, and Korea would get a lot of snakes. This reference was in terms of controlling expenditures.

Observation: KDI appears to have national identification and acceptance, an institutional capacity to attract quality staff, and a long term view of events and problem areas.

MEMORANDUM FOR THE FILE

DATE: May 6, 1974

SUBJECT: Interview with Dr. Park, Hyung Jong, Dean and Professor, School of Public Health, and Dr. Huh Jong, Chairman, Department of Health Services Administration, Seoul National University

It was Dr. Park's feeling that the ROKG has emphasized economic development but not health care issues in its five year plans, though there will be more emphasis given to health in the next plan scheduled to begin in 1977. Dr. Par was instrumental in convening a community medicine seminar which was attended by representatives of each of the 14 medi cal schools in the country. As a result, each school was to begin a community medicine program with these three function

1. Provide demonstration models
2. Training
3. Research

They were also to work with public health education in the provinces and with the new "village movement." Although several medical schools now have this community medicine program, Dr. Park's is the only one with a School of Public Health.

Dr. Park believes in low cost medical insurance programs. If the program is not low cost, the people cannot pay. He did not think the insurance scheme at the Seoul National University supported medical cooperative (Chunseong) would be self-sufficient. The utilization rate is running at 50% annually. The basic premium for this venture was calculated from the experience of Seagrave Memorial Hospital. He has considered using paramedics for immunizations and preventive care, but the law forbids them from administering inoculations.

The Chunseong medical co-op is chartered by ROKG through the Ministry of Health as a legal entity. Thus it can accept subsidies from central and regional government bodies. It can contract for M.D.s and for hospital services. He feels the Ministry of Health does not always approve insurance plans because of budget problems and management problems. Once projects are approved, the Ministry reviews their budgets on a regular basis. For the 5,000 people in this co-op, the total national government subsidy comes to 1,800,000 Won per year ($4,500). A sliding fee principle is

used whereby the poor can pay smaller sums for the insurance, i.e., the premiums are based on income. However, if they have no income, then the co-op cannot offer them medical insurance.

In reference to other insurance programs, Dr. Park said government employees are covered under civil service pension programs. Benefits are physical check-ups: prevalent diseases that take an employee off the job; and accidents or illnesses that occur on official work status Workmen's Compensation is for non-government employees and covers injuries on the job. However, there is no compensation for non-occupational injuries, or for dependents.

He said some medical co-ops are being operated in the private sector. He feels the business community has an interest in medical insurance but that workers do not care for deductions from their paychecks. In cases where industry is paying half the premium, that portion is considered as a deduction from corporate profits. Dr. Park said the government has collected large amounts of funds from Workmen's Compensation and Civil Service Pension programs. There was some question as to how these funds were being used subsequently for industrial expansion.

Details of the Chunseong Blue Cross Medical Care Cooperative follow:

1. Benefits

   a. 30% of hospitalization fees will be paid by Cooperative Union Members.
   b. 10% of out-patient treatment fees will be paid by the Cooperative Union Members.
   c. 40% of delivery (maternity) fees will be paid by the Cooperative Union Members.
   d. Upon the death of a Cooperative Union Member, that member's family will be paid 5,000 Won from the Cooperative Union.
   e. The contract hospitals appointed are the Chuncheon Provincial Hospital and Chuncheon Red Cross Hospital. If a specialist is not available in either of the two contract hospitals, another facility will be appointed.

2. Benefit Limitations

   70% of the total medical treatment fees for the following items will be paid by the Medical Care Cooperative Union Members:

a. Illnesses suffered within 2 months of obtaining membership;
b. Illnesses previous to membership;
c. Any physical examination in addition to regular physical examinations, and special laboratory examinations;
d. Physiotherapy and treatment of speech disorders;
e. Cases untreatable within 30 days.

3. Items excluded from Benefits

All of the following items are excluded from benefit coverage:

a. Leprosy, mental disease, narcotic addiction and alcholism, veneral disease, tuberculosis and communicable diseases;
b. Plastic surgery;
c. Blood transfusion and special immunization;
d. Spectacles, artificial limbs and artificial teeth;
e. Wounds and illnesses due to attempted suicide;
f. Cases in which liability for payment of medical fees rests with another group or person (eg., traffic accident, injury by violence, etc.).

Contract Hospitals and Treatment Procedures

1. Out-patients should present the medical cooperative union membership card and medical consultation card to the medical cooperative clinic before receiving medical treatment. (Out-patient treatment can be received only in contract hospitals.)

2. For hospitalization or surgery, the cooperative union member should present to the contract Hospital his membership card and consultation card and can receive hospitalization or surgery without having to pay a preliminary deposit.

3. Payment of the Fee for Out-patient Treatment and Hospitalization or Surgery.

a. The Cooperative Union Member must pay in advance for out-patient treatment and hospitalization or surgery as requested by the hospital.

b. 70% of the advance payment made by a member of the Cooperative Union to the hospital will be reimbursed to that member in cash beginning from the 10th day of the month following admission. However, in order for that member to receive payment, a receipt or bill from the hospital must be presented to the Cooperative Union.

4. Out-patient treatment can be received beginning from the day membership is obtained and hospitalization benefits can be received beginning two months after membership is obtained.

5. Mobile Medical Treatment Unit

A mobile treatment unit staffed with a medical doctor a nurse and other health workers will visit mountainous areas twice a month (eg., the Kumbyung Primary School, and Hyuldong Primary School).

## Support for the Cooperative Union Program

1. Support from the School of Public Health, Seoul National University.

   a. Provision of three health workers for the medical insurance office;
   b. Loan of one means of transportation (jeep);
   c. Provision of medical commodities;
   d. Guidance by a professor of the School of Public Health once every week;
   e. Aid in the administrative relationship with the Ministry of Health and Social Affairs.

2. County (Gun) and Province Support

   a. County:
      One million Won and administrative support.
   b. Province:
      (a) One million Won and administrative support.
      (b) The dispatch of a government physician.

3. Suppprt from the Provincial Hospital

   a. The members will be assisted with 30% of hospitalization cost.
   b. Periodic physical examination will be provided at a cost of 50 Won.
   c. Support in medical administration.

4. The support of medical business expenses by the Ministry of Health and Social Affairs.

## Income and Expenditures (Plan for 1974)

1. Income

   a. Admission Fee
      500 W x 5,000 members (1,000 households) == 2,500W
   b. Local Government Support
      2,000,000W(Count: 1,000,000W; Province: 1,000,000W)

c. Medical Cost Support by the Ministry
150₩ x 12 mos. x 1,000 households = 1,800,000₩
(150₩ per household every month)
d. Interest on Admission Fees
2,500,000₩ x 10,100 = 250,000₩

Total: 6,550,000₩

2. Expenditures

A. Expenditures excluding Some Sources of Assistance

a. The Payment of Hospitalization Fee
50₩ x 5,000 members x 1 time = 250,000₩
b. Salary of the Physician
150,000₩ x 12 mos. = 1,800,000₩
c. Salary of the Clerk
15,000₩ x 12 mos. = 180,000₩
d. Light and Heating
10,000₩ x 12 mos. = 120,000₩
e. Transportation Costs
25,000₩ x 12 mos. = 300,000₩
f. Special Treatment (by Professor of Medical College of S.N.U.) 20,000₩ x 12 mos. = 240,000
g. General Affairs
15,000₩ x 12 mos. = 180,000₩
h. Meetings and Social Expenses
10,000₩ x 12 mos. = 120,000₩
i. The Personnel Procedures Involved in Collectio of Admission
Fees: 60,000₩
j. Death Benefits
5,000₩ x 30 cases = 150,000₩
(an average of 30 people die each year)
k. The drug funds will be substituted from income of out-patients.

Total: 4,808,000₩

B. Normal Expenditures

a. Payment of Hospitalization Fees
754₩ x 5,000 members x 40/100 = 1,408,000₩
b. Periodic Physical Examination Fee
50₩ x 5,000 members x 1 time = 250,000₩
c. Personnel
(1) Secretary General
40,000₩ x 12 mos. x 1 person = 480,000₩
(2) Manager of Health Insurance
35,000₩ x 12 mos. x 2 persons = 420,000₩
(3) Clerk
20,000₩ x 12 mos. x 1 person = 240,000₩

(4) Physician
150,000₩ x 12 mos. x 1 person = 1,800,000₩
(5) Nurse
30,000₩ x 12 mos. x 1 person = 360,000₩

d. Office Expenses
15,000₩ x 12 mos. = 180,000₩
e. Light and Heating
10,000₩ x 12 mos. = 120,000₩
f. General Meeting and Material Cost
30,000₩ x 1 time = 30,000₩
g. Travel Allowances
3,000₩ x 4 times x 2 persons = 24,000₩
3,000₩ x 2 times x 1 person = 6,000₩
h. Education
3,000₩ x 20 places x 2 times = 120,000₩
i. Clerk Orientation
3,000₩ x 4 times x 2 persons = 24,000₩
j. Survey and Data Collection
40,000₩ x 1 time = 40,000₩
k. Inspection
40,000₩ x 1 time = 40,000₩
l. Transportation
45,000₩ x 12 mos. = 450,000₩
m. Commodities
100,000₩ x 1 yr. = 100,000₩
n. Death Benefits
5,000₩ x 30 cases = 150,000₩
o. The cost of drugs will be substituted from income of out-patients:

Observation: The Chunseong Cooperative has not yet been approved by the Ministry of Health to receive government subsidies, though this is expected within a few weeks. Also, actual expenditures and income has yet to be experienced in a meaningful manner and it is therefore difficult to venture projections on operations, managerial or administrative capabilities.

MEMORANDUM FOR THE FILE

DATE: May 7, 1974

SUBJECT: Interview with Dr. Park, Sung Ham, Vice Minister and Dr. Min, Chang Dong, Director, Medical Affairs Bureau, Ministry of Health and Social Affairs

It was stated at the onset that there were no standards of treatment, knowledge of bed days and similar utilization figures. As a result, they don't know if medical delivery has improved over time. The Ministry would like to be shown how this can be done, how utilization patterns can be tracked from one period to another. They were unsure about the future of the medical insurance law and its application in Korea, but did feel the costs, direct and indirect, have not been calculated by the government in the insurance programs presently funded. They figured that some 20,000 people were covered under their approved insurance plan. One difficulty, they noted, was the lack of desire on the part of employers to offer medical insurance to employees as part of a benefit package.

As far as the Ministry of Health is concerned, the past emphasis on government operated health centers was preventive medicine. Because of this, it is now difficult to merge the curative with the preventive into a mutually supporting relationship. They felt most Koreans do not use health centers because of their usage of curative facilities, i.e., pharmacists, herbalists, etc.

Dr. Scheyer asked if the Ministry would consider contracting out government health functions to the private sector. Dr. Min said this has been tried but they have found it difficult to support providers at competitive salary rates. Both the government and the private facility compete for patients who have the means to pay for bills rendered. Still, he said people won't utilize the government sector for health care--they want good care from the private sector. He really didn't have an explanation as to why they would not utilize government facilities. He did believe, though, the resident physicians on 6-month assignments in rural areas were experiencing good utilization rates.

Currently, the Ministry has about 800 M.D.s in service and another 340 are in the 6-month residency program. The professional M.D. is paid between 100,000 - 300,000 Won per month. According to Dr. Min, the average salary comes out

at about 215,000 Won ($542.00) per month. A public health nurse earns 32,000 Won per month while the 6-month resident is paid 50,000 Won per month. A qualified surgeon in Seoul or Pusan can earn 790,000 Won ($2,000) per month in private practice. When asked if a salary of 330,000 Won (approximately $10,000 per year) would keep an M.D. at the myon level, Dr. Min replied that it would. These are the authorized physician positions in government operated facilities

| | |
|---|---|
| National hospitals | 81 |
| National University hospitals | 252 |
| City University hospitals | 271 |
| Other National hospitals | 49 |
| City/Provincial hospitals | 407 |
| Health centers | 193 |
| Health sub-centers | 1,102 |
| | 2,355 |

Observation: The Ministry is concerned with finding some way to measure input and output characteristics of health delivery but does not know quite how to begin the process.

MEMORANDUM FOR THE FILE

DATE: May 7, 1974

SUBJECT: Interview with Mr. Sang Kyum Ko, Executive Vice President, National Agricultural Cooperative Federation, and Mr. Byung Hang Choi, Manager, Research Department

The National Agricultural Cooperative Federation (NACF) has 1,600 co-ops at the Myon level, called primary cooperatives, and 140 at the Gun level, called county cooperatives. Of the 2,800,000 agricultural workers in the country, the NACF has enrolled 90% as members. There are an average of 1,420 members per cooperative, and they presently hold 15.9 billion Won in share capital stocks. Stocks are limited to 100,000 Won per individual member, and the average held by all members is 7,000 Won.

The NACF owns and operates some medical facilities for its members. These do not offer comprehensive services and are rather limited to maternity cases, hygiene, home health care, etc. The M.D.s and nurses work directly for the NACF. The Federation feels it has the capability to deliver medical services to its members and stated categorically that it had "the plan" to carry this mission through. At the moment, where there is no resident M.D., the Federation can establish a facility and try to recruit a physician to staff it. They did not feel the government was doing much to develop health care in rural areas, but as income levels continued to rise, the ROKG will want to do more for rural residents. They stated emphatically their need to recruit providers and their willingness to do so. Moreover, they felt the future was particularly bright with respect to their plans for providing health care to co-op members. Presently, physicians are recruited to the NACF through the Ministry of Health.

The NACF's present medical facilities were constructed from dividends in the members' Mutual Insurance Plan. The Federation felt that farmers could not afford large expenses for medical care and therefore the co-op makes it available at cost in its clinics. If they were to expand their operations they would have to devote more funds

provide comprehensive services. However, the co-op is having difficulty compensating physicians at competitive salaries. They feel increased emphasis can be given to medical care for members by 1980.

The NACF is operating 260 clinic dispensaries and it's receiving an undetermined amount of aid from the Ministry of Health. This is not a subsidy as the NACF charter does not allow it to operate medical cooperatives and thereby qualify for the 150 Won per member per month subsidy. It is possible that the Federation will soon request a change in their charter to allow the formation of medical cooperatives.

The NACF is a multipurpose cooperative involved in:

a. Mutual Insurance
b. Marketing
c. Production
d. Banking and Credit
e. Foreign Trade
f. Farm Input Supply
g. Consumer Good Supply
h. Foreign Exchange and Foreign Loan
i. Utilization and Processing
j. Research
k. The "New Village Movement" (Sae-Maeul)

Observation: The NACF has administrative, managerial, organizational and financial capability. Medical provider capability is also present, as well as the plan and the willingness to expand services to its membership.

MEMORANDUM FOR THE FILE

DATE: May 7, 1974

SUBJECT: Interview with Dr. Choon Ho Sohn, President, The Korean Medical Association

Dr. Choon did not feel Korea had a plan for providing health care to the population and health, especially rural delivery, is directly associated with national economics. As for provider incentives, the establishment of country level hospitals with the capability to send out mobile teams to rural areas would elleviate the problems in physician recruitment. He feels the villages cannot support a good salary level for physicians and if the government would guarantee $500 per month in government health centers, all open positions would be filled. As it stands now, there are over 100 openings.

When asked about fee-for-service or capitation reimbursement for services, Dr. Choon said a monthly fixed salary is best so physicians can plan ahead. He did not think that physicians working in governmental health centers normally supplemented their salaries from private pay patients. In response to a question about group provider contracts with medical cooperatives, he did not feel comfortable in responding because the medical profession had little experience in this area, but he thought insurance would be applicable only to urban based populations. He was aware of a few group practices, in urban areas, usually 4-5 providers, though a lesser number have as many as 10-12 M.D.s. It was his opinion that people should be free to go to any M.D. and not be assigned to one through contracts. Again, this sentiment applied to urgan based residents. Provider contracts for a rural population were deemed proper.

Dr. Choon was asked how he felt about Physician Assistant's (P.A.s.) He would not like to see this occur in Korea as the length of training of health professionals is related to quality care for patients. However, if the P.A. worked directly for the physician and under his constant supervision, that relationship could be tolerated by the profession. But a Gun level M.D. and several P.A.s working out from his office would not be a tolerable situation.

In response to a question concerning the primary care delivered by pharmacists, Dr. Choon thought they now provided 70% of such care to patients. From a quality standpoint, if the patient was cured, Dr. Choon would say the treatment was proper. But if he was not cured, Dr. Choon would say the

treatment was proper. But if he was not cured and eventually went to a hospital, then the treatment was of low quality. When asked if primary care could be provided by M.D.s and P.A.s instead of pharmacists, he said this would not work because the former, in concert, could not be depended on for quality care. Too, he thought the "limited physician" concept would vanish as the GNP continues to move upward.

MEMORANDUM TO THE FILE

DATE: May 7, 1974

SUBJECT: Interview with Mr. Choi, Soo Il, Chief Division of Annuity Planning, Ministry of Health and Social Affairs

The Medical Insurance Law was promulgated on December 16, 1963 and revised on August 7, 1970. However, no decree is yet available for the 1970 law as E.P.B. does not agree with the proposed revisions, though the Ministry of Health does and believes the disagreement is due to national budgetary problems.

Contributions for medical insurance will be compulsory once the program is mandated. The government will handle payment for military personnel and government employees to medical cooperatives operating in areas of user residence. The basic model of the Medical Insurance Law follows the Japanese national insurance program.

Range of payment by employer/employee is 2-8% of annual salary. Or, the employer can pay a flat 50% of the premium and the employee the remaining part. For self-payors, the rate is determined by the cooperative. Originally, the national government was to pay the cooperative all costs of administration as a subsidy. However, a temporary measure is now in effect in which the government pays 150 Won per month per member to the cooperative. The subsidy is to be divided by the co-op in two portions: 70 Won for administrative expenses and 80 Won for member medical expenses. Whether or not actual treatment is given on a per patient basis the 150 Won subsidy is paid to the co-op for registered membership. The Ministry can and does control subsidy payments by limiting co-ops to a defined membership. At the beginning of each year, the co-op submits a budget to the Ministry of Health for approval. Each quarter thereafter, reports of income and expenditures are submitted and checked by the Ministry.

Presently, 5 pilot cooperative projects have been approved and these programs are receiving government subsidies:

1. Korean Oil Company, 4,780 members
2. Pong Myong Mine, 2,403 members
3. Korean Chemical Company, 3,437 members
4. Pusan Blue Cross, 14,850 members
5. Okgu Blue Cross, 9,200 members

The total budget approved for the year was 16,200,000 Won, of which 11,940,000 Won was allocated to the five plans listed above.

Eight other program requests were received last year but they were all rejected. The approved cooperatives have the administrative units to do the required reports for the Ministry. The co-ops can contract with hospitals and private M.D.s if they receive the approval from the Ministry to do so.

Observation: Mr. Choi was knowledgeable about the operation of the insurance law and seemed quite able. However, many staff were observed, though it did not seem the present scope of operations warranted this complement.

MEMORANDUM FOR THE FILE

DATE: May 8, 1974

SUBJECT: Meetings with Dr. Chong, Chun Hian, and Dr. Lin, H. T., World Health Organization, Seoul

FHC met with WHO on this date, May 11th, 17th, and 24th. These meetings were essentially briefings for both parties FHC discussed its role in Korea and WHO gave the team an overall preview of their own programs. WHO has been planning a pilot demonstration project for health services delivery at the community level. This pilot project includes written protocols and other defined tasks for paramedical personnel working directly under the supervision of a physician. Too, WHO will attempt to integrate staff and medical services through this project at the health subcenter level. The team understands this project will be implemented in the very near future.

WHO said they had a great deal of interest in medical insurance programs as they relate to the delivery of services. Dr. Chong felt that the private sector handled about 90 percent of medical care in Korea..."95% of the quality in care is due to the private sector," he said. They both felt it was necessary to expand services in the public sector as the private sector will take care of itself. It was their feeling on looking at available data that of the 16,700 licensed and working physicians, over 45 percent of them were resident in Seoul and Pusan.

During the last meeting on May 24, WHO expressed interest in the specifics of the FHC recommendations to USAID. However, the team did not feel it appropriate to discuss them at this time.

MEMORANDUM FOR THE FILE

DATE: May 8, 1974

SUBJECT: Interview with Mr. Richard Niebuhr, International Monetary Fund

Mr. Niebuhr said he was not familiar with the health care sector in Korea. In general, though, he thought expenditures above those now being allocated would not be viewed favorably by the IMF in view of the present economic situation in Korea. An increase in health care outlays, therefore, would be considered something of a luxury that the ROKG cannot afford against more urgent developmental funding requirements.

MEMORANDUM FOR THE FILE

DATE: May 8, 1974

SUBJECT: Interview with Mr. Chai Kyu Cher, Managing Director, Korean Blue Cross

Mr. Chai said he is attempting to attract prominent Koreans to the Blue Cross movement in order to get a national identity. He views the government as somewhat an obstacle in this as it does not seem disposed to recognize the efforts of the private sector in health insurance. In response to the question on what demands employees were making to employers for health insurance coverage, he mentioned that foreign companies were presently the most active in this area.

The use of credit unions to form medical cooperatives was brought to his attention. He said it was his feeling that credit union leaders wanted this service to be organized as a separate legal entity. Otherwise, relationships may blur, i.e., some members own food stores and they would be opposed to the formation within the credit union of a consumer cooperative. Mr. Chai said credit unions are useful in making credit available for funding medical facilities, equipment, etc. He was not against other types of cooperatives forming integral medical cooperatives, or owning hospitals and contracting out services to M.D.s.

He was asked if a separate revolving fund could be utilized by the Credit Union Federation for the development of medical cooperatives and facilities. Although he was positive in his response, he was quick to point out that management skills and the building up of a competent core staff were the most important for any allocation of development funds. At the moment, the Korean Blue Cross has to work with existing hospitals and church groups that own hospitals. He found it most difficult to work with the provincial hospital system. He did say, though, that where missionary hospitals and credit unions exist, the medical insurance scheme can work.

Mr. Chai said 15 Blue Cross plans were affiliated with the Korean Blue Cross. The Seoul Blue Cross had 4,000 members and four full-time paid staff were complemented by volunteer assistance. In all, the 15 plans have an estimated membership of 60,000. In Seoul, the annual fee was 10,000 Won in 1970 and this increased to the present fee of 16,000 Won in 1972. There is no capitation; they own no facilities, and the M.D.s want only a fee-for-service arrangement with Blue Cross.

It was his feeling that the ROKG did not want to give a license to the Korean Blue Cross to operate facilities because the organization has been unable to demonstrate a capability to set aside reserve funds. For this reason, many private companies who have expressed an interest in joining the plans have subsequently backed off. His three main problems were:

1. Obtaining a government license
2. Establishing a reserve fund
3. Ownership of facilities, especially hospitals

While the Korean Blue Cross is not operating illegally in its marketing activities, Mr. Chai said it was not entirely legal either. It appears this is due to a technicality: the application for licensure was rejected on the basis of an inability to establish a reserve fund. However, it can operate its programs while it attempts to develop such a fund. For its part, the ROKG is not encouraging commerce and industry to join the plans until the license is granted.

The Korean Blue Cross has group policies with a Japanese company and this company received a discount on the premium for group enrollment. The same discount would be offered to other corporations. Some companies paid the full premium for their members (mostly foreign-based), while most shared the premium on a 50/50% basis. Benefits are the same from one Blue Cross plan to another according to Mr. Chai. Employees are required to pay income tax on cash benefits received from these plans. It was his feeling that more and more employees are demanding health benefits from their employers.

He has studied the HMO model concept and the Pusan Blue Cross plan and believes this data demonstrates a plan needs an enrollment of 20,000 to break even. For instance, the Seagrave Memorial Hospital which operates a Blue Cross plan with considerably less than that

figure collects only 64% of its total operating budget from enrolled members. (The provincial government provides the remaining 30% and the Ministry of Health, 6%.) He feels the operating experience of Seagrave's Hospital would be directly applicable to a Blue Cross hospital in Seoul. Before Seagrave instituted the insurance plan, their utilization pattern was poor, but it has since improved through Blue Cross implementation.

Blue Cross plans can change their premium structure twice a year. He said the collection rate on premiums was currently running at 90%. Mr. Chai did not feel he needed additional staff, but he could use staff for other medical cooperative development, education and training programs.

Observation: Mr. Chai is an organizer and a moving spirit. The Korean Blue Cross lacks efficient management and administrative capability. Also, the annual premium payment by members tends to allow for a forecast of expenditures on present income levels instead of a 1/12 percentage allocation. One result is that although the premium cost has remained steady over the past two years in the Seoul Blue Cross, independent evidence suggests a reduction in benefits has occurred and payment of claims has been a management problem.

MEMORANDUM FOR THE FILE

DATE: May 8, 1974

SUBJECT: Interview with Mr. Choi, Chang Rok, Assistant Minister of Operations, Economic Planning Board

Mr. Choi was asked what procedures his office used to plan budget outlays for public health. First, he said, they looked at standard indicators, fixed costs and operating costs, added by 1-2% on top and then estimated the rate of inflation. However, the final figure came out from this process, the actual resource allocation for public health had to be in the range of 1.5% of GNP. It was that simple. Although there were provisions for increases in the budgets of individual departments, the impression was left that this was not the usual case.

Private medicine and the health sector have not benefited from the ROKG in his opinion. Whatever credit is due for the advancements in medical care delivery has been earned through the efforts of the private sector. Moreover, he felt the private sector has a low cost-benefit ratio in relation to services delivered. He has no objection to the private sector taking on the total health care system and making it work efficiently in Korea. But, can it work, can they do it? When the private sector is successful in ventures of this nature (he referenced the Scandinavian experience), it does not last long. For instance, if they were operating the system one year with only a 20% subsidy from the government, they would probably come back the next year and ask for a 30% subsidy. Overall, he thought Korea would have to wait 3-5 years, until the per capita income was $1,000, before the Medical Insurance Law is funded.

MEMORANDUM FOR THE FILE

DATE: May 8, 197

SUBJECT: Interview with Mr. Augustine Kang, General Manager, Asia Confederation of Credit Unions

Mr. Kang stated from the beginning that cooperatives could manage medical care delivery for the population. Korea should not rely on profit oriented hospitals, church groups or charity organizations for health care delivery. In response to a question on how people could manage and own medical care services, Mr. Kang said pressure from the top resulted in villagers forming agriculture cooperative and Credit Unions. It would be somewhat different with medical cooperatives using prepayment schemes because people do not want to pay premiums when they are healthy. He felt Credit Unions could do health delivery as they have the system and the organizational discipline. The way health care is presently delivered, the poor are treated as uninvited guests while those who can afford treatment are given the best rooms and the best of service.

Mr. Kang said there were over 300 Credit Unions operating with 40,000 members. (He cautioned us to check with the National Credit Union Federation as his figures were dated.) Most of these were located in urban areas. The Korea Credit Union League was established in September 1970 as the juridical person under the Civil Code. The Credit Union Law was passed by the National Assembly in August 1972. On March 24, 1973, the Korea Credit Union League was dissolved and the National Credit Union Federation of Korea was organized under the Credit Union Law on March 24, 1973.

Mr. Kang is a member of the Seoul Blue Cross plan. The premium, paid annually, is $40.00 which covers his family and maid. If hospital in-patient care is required, the member pays the full 100% charge upon admittance and is then reimbursed by Blue Cross at 70% of original payment. He said the Blue Cross in Seoul has management and administration problems in making timely claim reimbursements to members. Many members of the Blue Cross are also members of the Credit Union and use it to pay hospital bills. In fact, the Blue Cross regularly deposits some portion of paid premiums in the Credit Union and uses this facility to pay members when bills are submitted and to pay hospitals for charges to members. Hospitals under contract to Blue Cross give members a 20% discount.

The physician community has been against Credit Union sponsored medical cooperatives. They feel it is forcing competition: they don't want standards imposed and they would like to continue with the freedom they now have to change

practice modes as they wish. That is, the membership of the Credit Union is composed of some medical professionals. If their Credit Union was to organize an integral medical cooperative, these members would feel this an unwarranted imposition on the prerequisites of their profession and probably cease membership. Some physicians are totally against any form of medical insurance. However, in response to a question, Mr. Kang said if the Credit Union and the Medical Cooperative were separate entities with mutually supportive linkages, that model would be acceptable.

He was asked what this would require in terms of financial support from outside sources. His response was sufficient funds to train a staff on the concept of separate cooperative entities, as mentioned above, to organize these cooperatives through the Credit Union movement by using Workshops, Seminars and similar educational mechanisms. Ideally, this could be accomplished through a volunteer effort but there would have to be funds to support 2-3 full-time staff to provide continuity during a period not to exceed 3 years. The separate entities would be Blue Cross Medical Cooperatives. After the 3 year period, the Medical Cooperatives should be self-supporting and able to continue on with their own generated resources.

In terms of pooled risk sharing among the cooperatives, Mr. King felt the Korean Blue Cross Federation could be improved to handle this function, as they know from experience data collection, the cost of premiums, etc. He believes we should support the Federation so the Credit Union movement could subsequently become involved in the total effort. He stressed again the urgent need to improve management and administration capabilities within the Blue Cross Federation. And, before embarking on a national program, local units should be organized.

The Credit Union movement has spread rapidly in Korea. Mr. Kang accounted for this in part, because of the support by industrial companies. Their employees used to ask for extensive salary advances and if it could not be obtained, they tended to move on to another company. Now, these same employees go to the Credit Union, which is often located on plant property, and employee turn-over has been lowered.

Observation: The Credit Union movement appears to be growing and gaining acceptance in Korea. The Korea Credit Union League assists in the organization, training and support of member unions. A standard accounting and reporting system is used and supplied to local units by the League.

MEMORANDUM FOR THE FILE

DATE: May 9, 1974

SUBJECT: Interview with Mr. T. J. Kim, Assistant Chief Secretary to the Board Chairman, The Samsung Group

In 1972, the Chairman of the Samsung Group raised a bond and endowed a Foundation for employee medical expenses with a ₩1 billion grant. Eighteen companies of the Group with 20,000 employees participate in Foundation benefits. Each year, these companies contribute stock to replenish outlays for disbursements. Employees do not contribute any funds. The basic idea was adopted from the Carnegie Foundation.

During 1973, the Foundation paid out ₩4.6 million for 923 maternity cases; ₩900,000 in death benefits; ₩4.2 million for 197 medical cases; ₩6 million for educational grants; and ₩5.6 million for physical health and recreation expenses. Other miscellaneous outlays were ₩1.1 million. The endowment earned ₩40 million in stock dividends last year and paid out to employees ₩22.5 million. The Foundation operates on a tax free status and the original ₩1 billion grant was considered a deductible item for the Chairman.

In 1973, 50% of the employees' medical expenses were paid from the Foundation. This year, the Foundation plans to increase it to 80%. Employees must make application to the Foundaiton and grants are given only to bills in excess of ₩8,000. However, some exceptions are made to this rule, depending on the individual case. For maternit cases in the home, only ₩5,000 is paid in contrast to the ₩30,000 paid for in-hospital births. Death benefits are from ₩50,000-300,000 depending on employee salary level. While there is no death benefit for dependents, the Group may make a condolence grant to the employee. The Group's employees use the company's hospital in Seoul and contract with 20 others around the country for other employees.

The Group researched the government medical insurance plan but rejected it and organized the Foundation.

Permission was granted by the Ministry of health through the Office of Labor Affairs. Mr. Kim stated that the Group was the only private firm in Korea operating such a Foundation. Although they heard about the government subsidy program, the Group felt it would have to add one more staff man just to handle reporting requirements and to satisfy Ministry of Health requirements. They felt this was too bureaucratic an arrangement.

Observation: The benefits from the Foundation directly affect employee productivity. They feel if they help the company to increase profits, more benefits will accrue to them. The Foundation appears to have good management and financial capability.

MEMORANDUM FOR THE FILE

DATE: May 9, 1974

SUBJECT: Interview with Mr. Howard Hansen, Manager, American International Underwriters, (Korea), Ltd.

The American International Underwriters (AIU) believes there is a need and a market for health insurance in Korea. Currently, they are prohibited, as are other private companies, from marketing such a program to Koreans. However, in early May they began selling a Hospital Income Insurance plan, mainly to employees in joint venture companies, though it is not limited to the expatriate community. This plan pays a specified amount per week for in-patient hospital coverage. For instance, for those under 40, an annual premium of 10,000 Won will yield a benefit of 25,000 for up to 26 weeks in case of hospitalization for illness or injury. The benefits are paid directly to the beneficiary. Pregnancy or miscarriages, and conditions resulting from congenital anomalies, etc., are excluded. The Hospital Income Insurance is sold on a group basis at 20% discount to companies who enroll over 100 members. This program is adapted from one AIU marketed in the Philippine Islands. Mr. Hansen was unsure of the soundness in this new program and expressed some doubts as to its financial viability. However, he sees its redeeming value in the provision of a data base for future programming efforts. This seemed to be in connection with a belief that the ROKG will eventually open up the market to the private sector and AIU wants to be ready with acturial and statistical indicies.

Mr. Hansen said he has received several solicitations from the Seoul Blue Cross plan and has noticed over time a decrease in benefits though the premium has remained the same.

Observation: Essentially, AIU is skirting legal requirements set down by the Ministry of Health by selling a Hospital Income plan vs. a health insurance plan.

C-43

MEMORANDUM FOR THE FILE

DATE: May 9, 1974

SUBJECT: Interview with Mr. James Williams, Director, Peace Corps

Mr. Williams thought the impetus for ROKG interest in health care sector may have come from the North-South Red Cross exchanges. Here, it was learned, the North had developed an efficient public health care system. In all other respects, there is no doubt South Korea has a considerable edge in agriculture, industrial capacity, etc., but not in health care.

It was his feeling that there was no lack of skills in the country but a lack of institutions that could utilize and mobilize these skills and distribute them efficiently. For instance, the ROKG has produced many paramedical technicians, but in civilian life these skills are lost through non-application in the health care field.

MEMORANDUM FOR THE FILE

DATE: May 9, 1974

SUBJECT: Interview with Mr. Pyung Yi Kwon, Manager, Employee Relations, Korea Oil Corporation

The Korea Oil Corporation (KOCO) was the first corporation to be approved by the ROKG under the Medical Insutance Law. Their prepaid health plan was developed over a three-year period during which the insurance plans of Blue Cross in Pusan, the Honam Fertilizer Company, and a mining company were studied. KOCO added 30% on top of these cost experiences to determine the health insurance premium for their employees.

KOCO started their prepaid health plan on August 16, 1973. They did not believe a straight 1.5% deduction each for employee and employer was an equitable way to deduct from salary for premium costs. Instead, they base payroll deductions on a flat rate and this is shared 50/5( between employee-employer regardless of income levels.

In terms of priority, the corporate tax deduction was more important to KOCO than the government subsidy. Howe\ in order to implement the plan, KOCO had to go through the Ministry of Health for approval. Without this, they could not obtain the tax deduction from the Ministry of Finance. KOCO pays 20 million Won per year to the insurance plan, the employees contribute another 20 million Won, and the government gives a subsidy of 2.5 million Won. Over 76% of all KOCO employees throughout Korea are members of the plan. KOCO says they could not have offered this plan to employees if less than 65% of them did not agree to join from the onset of operations. The insurance covers 60% of costs for employees and 40% for their dependents. Under the plan, members can also obtain loans to pay for expenses not covered on hospital charges.

During the past ten years, KOCO's experience with Workmen's Compensation demonstrates a 60-70% return in benefits to employees over a 100% contribution from the company. In this same period, their corporate tax has decreased from 1.5% of total salary to .9% due to reduced accidents and safety programs instituted by the company. Last year they paid in the equivalent of $70,000 to Workmens Compensation but employees actually received only $42,000 in benefits for work related injuries. This translated to a $28,000

loss on contributions, or some 11,060,000 Won-- 26% of the total costs for the health insurance program.

KOCO related these figures to the difficulty in obtaining legitimate compensation for its employees through government channels for induced injuries. Again, it appears, through the question was not answered directly, that the ROKG is using funds collected through Workmen's Compensation for industrial expansion purposes. Over 1 million workers throughout the country are covered under this law.

KOCO pays M.D.s 513,500 Won per month ($1,300) and nurses 79,000 Won ($200) per month. Still, they say it is difficult to keep M.D.s on board at this salary rate. At the moment, they cannot consider the possibility of owning and operating their own hospital due to the expenses involved in such an operation. During the past 4 months, 72% of premiums have been paid out for medical care to KOCO employees, and the company earns a 40% tax deduction on its 20 million Won yearly contribution.

The employee's contribution is 400 Won per month plus 200 Won for each family member. The government subsidizes an amount of 110 Won per enrolled employee per month. The plan reimburses medical expenses up to 480,000 Won for employees and 360,000 Won for each dependent per year. A 50,000 Won benefit is paid for maternity cases and delivery can be in the hospital or in the home. A 30,000 Won benefit is paid for abortions when authorized by an M.D. KOCO has verbal agreements with 8 hospitals in Seoul and another 26 throughout the country for employee utilization through the insurance plan. Some 50,000 KOCO employees are participating and covered by the KOCO plan.

KOCO said there are many problems in following government requirements with health care insurance programs. For one, the hospital must give the discount if certain kinds of services are needed by a KOCO employee. A potential agreement (contract) with a hospital can and is difficult to negotiate because of this restriction. For its part, KOCO says they do not need the discount and hospitals do not care to make agreements if government guidelines have to be followed to the letter.

KOCO says that it allows subsidiary and affliated companies to join the plan. Too, the company has been approched by other firms with requests to take on their employees under the KOCO insurance plan but so far the company has been unable to assist them.

Observation: The KOCO sponsored plan should be closely studied as it can provide good operating data for other firms, both private and non-profit. Too, it appears to have excellent managerial and administrative capability: all bills are paid when rendered, and cost centers and accounting procedures are established and performed monthly.

MEMORANDUM FOR THE FILE

DATE: May 10, 1974

SUBJECT: Interview with Mr. James Perry, Manager, Mr. Larry Lewis, Assistant Manager, Fairchild Semiconductor, Seoul and Mr. Moon, Industrial Relations Director

Fairchild operates a dispensary staffed with 1 full-time M.D. and nurse. Most visits by employees are for eye strain and nervous stomachs. Apparently, this is due to the tedium involved in the production of transitors, especially the high power scopes used by the girls to check wire connections. Mr. Perry said it costs ₩100 per month per employee for Fairchild to support the dispensary. This includes the ₩240,000 ($600.00) salary for the M.D. Some 20,000 visits per year are credited to dispensary staff.

Fairchild also has set aside space in the plant for a Credit Union and over 40% of the employees are members. The Credit Union associated with the national Federation. Fairchild now gives employees salary advances for medical expenses but Mr. Perry says this practice has lessen somewhat since the Credit Union was organized. Fairchild also gives "company" cards to employees which entitles them to a 10-20% discount when using approved hospitals.

When questioned about membership in Blue Cross for Fairchild employees, Mr. Perry felt the ROKG would intervene and make it a compulsory program for all employees once Fairchild attempted to provide only for those who wished to join. He did not believe Korean firms wanted health insurance plans but that foreign based firms were open to the idea. For instance, the National Metal Workers Union, which represents 90% of Fairchild employees, discussed medical insurance benefits at one time during recent labor negotiations but then dropped the subject.

Observation: The dispensary keeps productivity up. The FHC team wonders what happens to the girls, who stay an average of 2-3 years, when the go back to their villages with industrially induced health complications: visual acuity, etc.

MEMORANDUM FOR THE FILE

DATE: May 10, 1974

SUBJECT: Interview with Mr. Kwak, Chang Yul, Managing Director, National Credit Union Federation of Korea

Mr. Kwak said the Federation currently has 228,802 members in 834 Credit Unions throughout Korea. Their growth rate has been rather rapid in the past several years. For instance in 1969 they had 50,905 members in 327 Credit Unions. In that same year, outstanding loans were $1,360,002 and as of March 31, 1974, these stood at $3,751,382.

The Federation provides these services to members:

a. An education activity for new Credit Union organization
b. Business guidance for Credit Union management
c. Auditing services
d. Central banking service - receive deposits and make loans
e. Insurance service - live saving insurance and loan protection insurance
f. Material supply service - all bookkeeping forms and documents are supplied to member Credit Unions
g. Publication service

Mr. Kwak stated that he was interested in health care for Credit Union members. He said no Credit Union operates a health insurance scheme but that some individual members belong to Blue Cross. The Federation has a banking relationship with Blue Cross but does not give any other technical assistance. Although he thought it would be possible to begin a program of health insurance within the Federation, he does not care to do this under the auspices of the Ministry of Health. The Federation is under the Ministry of Finance and would prefer working under that arrangement. As it stands now, the law forbids Credit Unions from organizing health insurance cooperatives.

In response to a question, Mr. Kwak said his organization encourages its members to join Blue Cross. and

Blue Cross premiums are deposited with Credit Unions. He said the Federation could extend credit to the Blue Cross to help it expand facilities. When asked if the Federation had the management capability to enter the medical insurance field, he answered quite positively and was supportive of the concept.

The Federation has a revolving fund for use by its member unions. This fund was established by USAID/Seoul and it is used for inter-lending purposes. Members are charged 1% interest per month when borrowing against this fund.

The Federation is supported by its members through a compulsory $5.00 one time charge when Credit Unions initially join. All Credit Unions are then asked to purchase $25 (1 share of stock) in the Federation. Additional funds are obtained from a 1.5% monthly charge on savings in the General Fund, and audit services are billed directly to members.

Mr. Kwak said that legally the Federation could extend loans to its members to form medical cooperatives such as Blue Cross, but administratively the Federation was not prepared to do this. He meant the Blue Cross had to be a member of a local Credit Union but have a separate board of directors.

Credit Union loans are separated in these categories

| | | |
|---|---|---|
| a. | Production loans | 22% |
| b. | Paying off usurious loans | 18% |
| c. | Small business loans | 18% |
| d. | Education | 14% |
| f. | Housing, rent and repair | 10% |
| g. | Medical care | 10% |
| h. | Miscellaneous | 8% |

Oberservation: The Federation has management and financial capability. It is aware of medical insurance and is interested in assisting its members develop such programs. The question is how to do this legally and under what ministerial roof should it be placed.

MEMORANDUM FOR THE FILE

DATE: May 10, 1974

SUBJECT: Interview with Warren S. McGill, Administrative Manager of Kaiser Foundation International (Dr. James Hughes, Executive Director of Kaiser Foundation International, was out of town)

Mr. McGill stated that Kaiser Foundation International was interested in providing services in Korea. Its long range objective is to develop a capability similar to the U.S. Kaiser Health Plan and provide on a comprehensive, prepaid basis health and hospital services. It recognizes that such a undertaking in the long-run requires entering the area with more modest goals. These include, e.g., employing local resources while providing occupational health services, or taking on certain public health functions.

In general, where Kaiser installations are not present KFI ideally wishes to be invited by a government to set up a pilot program which offers services to a predetermined population, in a defined geographical area.

Its second preference is for USAID support in servicing a predetermined population (note payment per capita).

Finally, it is prepared to contract with industry to provide industrial health services, and/or such other services as may be required.

KFI views its entry into foreign markets as incremental, establishing credibility, responding to increasing demands.

Notwithstanding it is prepared while entering at a lesser level to immediately engage in efforts to realize a higher level of operations.

The key determinant of Kaiser efforts is the viability of a total program in the long-run. While it is prepared to amortize certain "growing" costs, expenditures involved in determining its entry, and the appropriate level must not be speculative.

Current annual costs for KFI's Volta operation in Ghana, including a 12-bed hospital, serving some 15,000-20,000 persons, providing drugs, medical supplies, physicians' services, administration, laboratory, x-ray and staffing is approximately $400,000 annually. The determination of costs in Korea depends on local pay scales, etc.

The capital investment by Kaiser will vary depending on local resources and capabilities.

Mr. McGill requested we talk with KFI on our way back from Korea.

MEMORANDUM FOR THE FILE

DATE: May 11, 1974

SUBJECT: Meeting in Jon Keeton's home with 12-14 Volunteers assigned to health projects throughout Korea. Mr. Keeton is Deputy Director, Peace Corps, Korea.

The Volunteers were interested in the FHC assignment and the impressions we had gained during the past week of interviews. For its part, the team wanted to test out the concept of utilizing the private sector for health services delivery. That is, the services now being provided by provincial hospitals and the health centers could be contracted out to the private sector, at least on a pilot basis. This would allow a comparative analysis of services to be conducted over time to determine differences in cost, process, outcome, etc.

Initially, the Volunteers resisted this idea but were curious as to how it would work. This led to a discussion on trends developing in the U.S. toward community ownership of health services and facilities, i.e., the National Health Service Corps and H.M.O.s. They then said their experience was solely in the public sector and they had not ever considered the possibilities for the delivery of health services that may exist elsewhere. In the end, they said a private sector approach was worth trying as the public sector wasn't very effective in its present role.

MEMORANDUM FOR THE FILE

DATE: May 13, 1974

SUBJECT: Field trip--Okgu. Interview with Dr. Kim, Kyoung Sik, Director, Institute for Rural Health, Seagrave Memorial Hospital, and Dr. Yoon, Sang Won Director of the Board for the Institute and the Hospital

The main hospital building was started in 1968 and completed in 1970 at a cost of $599,207. Annexes consist of a supply warehouse, food warehouse, generator room, and morgue. The hospital is centrally heated and has four vehicles: an ambulance, bus and two jeeps. The authorized staff is 89 and at the time of the visit, 83 were on staff. In terms of health professionals, this staff consists of eight M.D.s, two pharmacists, six medical technicians, and 24 nurses. The authorized bed capacity is 96, of which 65 are now operating beds. Clinical services offered are:

a. internal medicine
b. pediatrics
c. general surgery
d. orthopedic surgery
e. obstretrics and gynecology
f. E.N.T.
g. dentistry
h. clinical pathology
i. anesthesiology

The statistical analysis of patients treated during the past four years is as follows:

Chart 1--Out-patients

| Years | No. of Patients | Days treated | Average Daily No. of Patients | Average days treated Per capita |
|---|---|---|---|---|
| 1971 | 17,273 | 53,546 | 57.5 | 3.1 |
| 1972 | 31,468 | 138,459 | 104.8 | 4.3 |
| 1973 | 36,425 | 207,622 | 121.4 | 5.6 |
| March 1974 | 9,404 | 33,854 | 104.4 | 3.5 |

Chart 2--In-patients

| Years | No. of Patients | Days treated | Average Daily No. of Patients | Average length of stay | Occupancy rate |
|---|---|---|---|---|---|
| 1971 | 1,316 | 11,592 | 31.7 | 8.8 | 48.8% |
| 1972 | 1,476 | 12,252 | 33.5 | 8.3 | 51.6 |
| 1973 | 2,518 | 7,688 | 48.4 | 7.0 | 74.5 |
| March 1974 | 756 | 4,884 | 54.2 | 6.4 | 83.4 |

YEARLY PATIENTS TREATED: CHARGED AND CHARITY CASES

Chart 3--Out-patients

| | Charged cases | | Charity cases | | Total | |
|---|---|---|---|---|---|---|
| | No. of Patients | Days Treated | No. of Patients | Days Treated | No. of Patients | Days Treated |
| 1971 | 10,364 | 33,061 | 6,909 | 20,485 | 17,273 | 53,546 |
| 1972 | 18,881 | 83,671 | 12,587 | 54,788 | 31,468 | 138,459 |
| 1973 | 21,851 | 126,650 | 14,574 | 80,972 | 36,425 | 207,622 |
| 1974 | 5,643 | 21,329 | 3,761 | 12,525 | 9,404 | 33,854 |

as of 30 March, '74

Chart 4--In-patients

| | Charged cases | | Charity cases | | Total | |
|---|---|---|---|---|---|---|
| | No. of Patients | Days Treated | No. of Patients | Days Treated | No. of Patients | Days Treated |
| 1971 | 851 | 6,956 | 465 | 4,636 | 1,316 | 11,592 |
| 1972 | 993 | 7,351 | 483 | 4,901 | 1,476 | 12,252 |
| 1973 | 1,707 | 10,603 | 811 | 7,085 | 2,518 | 17,688 |
| 1974 | 444 | 3,170 | 312 | 1,714 | 756 | 4,884 |

as of March 1974

The hospital operates a mobile service clinic. The purpose of this service is to:

1. reach and determine community health problems
2. find and treat patients in need of help
3. give health education in various community settings

The mobile team, equipped with one jeep, consists of:

Seagrave Hospital
2 M.D.s
1 Nurse
2 Student nurses
1 Driver

Public Health Center
1 Nurse
2 Public Health aid-nurses

This team covers 10 Myons and the islands of Okgu-Gun. Each Myon is visited once a month. Drugs and medical supplies are provided by Seagrave Hospital. During the past four years the mobile team was responsible for the treatment of these patients:

YEARLY PATIENTS TREATED BY MOBILE CLINIC TEAM

| Years | Total |
|---|---|
| 1971 | 840 |
| 1972 | 25,924 |
| 1973 | 94,715 |
| March 1974 | 17,339 |

YEARLY PATIENTS TREATED BY DEPARTMENT

| Years | No. of Patients | Days Treated | Services | | | | | Treatment Fee |
|---|---|---|---|---|---|---|---|---|
| | | | Med | Ped | Surg | Obgy | Other | |
| 1971 | 280 | 840 | 623 | 129 | 52 | 8 | 28 | 8,270 |
| 1972 | 4,995 | 25,924 | 22,696 | 2,566 | 472 | 32 | 158 | 2,172,300 |
| 1973 | 17,128 | 94,715 | 85,509 | 7,183 | 768 | 73 | 1,182 | 11,080,796 |
| 1974 | 1,427 | 15,339 | 17,795 | 1,319 | 80 | 7 | 138 | 1.799,590 |

The Okgu Blue Cross is a separate legal entity but it is affiliated with the Seagrave Hospital and Rural Health Institute. The Ministry of Health provides a subsidy of ₩150 per month per household for administrative expenses. The Okgu Blue Cross was the first rural insurance program to be approved by MHSA, but the subsidy covers only 1,000 households of the 1,548 registered in the plan. Members pay an extrance fee of ₩300 per household and a monthly fee per member of ₩100. The analysis of those covered under the Blue Cross program follows:

BLUE CROSS PLAN

| | 1973 | March 1974 |
|---|---|---|
| Individual insured | 8,863 | 9,175 |
| Morbidity monthly | 22.1% | 22.1% |
| Demand rate of treatment | 54.0% | 38.6% |
| Out-patients | | |
| Average treatment days | 3.9 days | 3.4 days |
| Average treatment fee | ₩355 | ₩413 |
| In-patients | | |
| Average treatment fee | 6.6 days | 7.5 days |
| Average treatment fee | W4,810 | ₩4,566 |
| Delivery | | |
| Average treatment days | 3.0 days | 3.5 days |
| Average treatment fee | ₩5,560 | ₩6,050 |
| Ratio of Ratients category | | |
| Out-patients | 97.0% | 97.1% |
| In-patients | 2.4% | 2.6% |
| Delivered | 0.6% | 0.3% |
| Total | 100.0% | 100.0% |

CHARGE RATE FOR TREATMENT

for 1973

| | Member | Discount (Hospital) | Blue Cross | Total |
|---|---|---|---|---|
| In-patient | 30% | 10% | 60% | 100% |
| Out-patient | 10% | 10% | 80% | 100% |

Revised for 1974

| | | | | |
|---|---|---|---|---|
| In-patient | 40% | 20% | 40% | 100% |
| Out-patient | 30% | 20% | 50% | 100% |

Three critical problems were cited:

1. Premium collection is difficult. A 90% collection rate is needed, but only 80% is collected at the present time.

2. Transportation of members to hospital.

3. When joining the Blue Cross plan, households under report family members.

Public health center is used as a collection agent. Otherwise, Blue Cross waits until a member comes in for a medical service to collect the premium. Dr. Kim thought a medical cooperative would be a good collection agent.

The Blue Cross premium has been set low deliberately in order to attract a low income population. In fact, the plan discourages urban residents in Kunsan from membership. The Rural Institute wants to prove that health insurance can work among rural residents in the low income range. Middle class income people are able to pay for medical services when they use them. Dr. Kim said his facilities are not large enough to cover high income people.

There are four staff members assigned to the Okgu Blue Cross plan. Three of them are covered, in terms of salary, through the MHSA subsidy, while the Rural Health Institute and hospital cover the costs for the fourth member. The Blue Cross membership accounted for 30% of all outpatient visits and 10% of all hospital

days. Overall, the Rural Health Institute, Seagrave Hospital and the Okgu Blue Cross had a surplus in 1974 of ₩28,800 against an income of ₩112,196,000. The Blue Cross accounted for ₩11,945,000 of total income, or 9.4%.

Dr. Kim stated that the Okgu Blue Cross was not affiliated with the Korean Blue Cross Federation. He felt the Federation only wanted the membership fee and he would rather "go it alone".

Observation: Dr. Kim and Dr. Yoon are conducting an impressive operation. Excellent management and administrative skills seem to be present. The Blue Cross plan appears headed for trouble, however, as it is appealing to a skewed population/low income group. Its financial contribution to the overall operation is disproportionate to utilization by membership of facilities and equipment.

MEMORANDUM FOR THE FILE

DATE: May 14, 1974

SUBJECT: Field visit and interview with Dr. John Sibley, Director, Koje-do Community Health and Development Project, and Dr. Shim, Administrator for Insurance Plans

Dr. Sibley said the genesis of the insurance program started two years ago as the result of a meeting with community leaders and the Board of Trustees. In theory, the Credit Union idea was the structure they used--from there it was an easy step into an insurance program. That is, the Credit Union was in place in Koje-do and they used it as an institutional concept to build a medical insurance program. Also, the Pusan Blue Cross and the National Federation of Blue Cross helped with the initial organizational work.

There are now 2,600 people in the plan. The premium is ₩60 per month per person. A one time entrance fee is ₩250 per person. Dr. Sibley estimates that 20-25% of the residents of Koje-do cannot afford to buy into the plan. It simply is not in their priority to do so now. He said the cost of the premium is designed to maximize enrollment.

In 1972 the average outpatient charge was ₩544, including drugs. Last year, this increased to ₩700, again including drugs. He estimated that 14 out of 100 patient visits were covered by medical insurance.

In 1973, the project treated 15,607 outpatients and 241 inpatients. Its operating budget for the year was ₩32,190,000 of which expenditures were ₩28,772,277. Although there was a surplus of ₩3,417,723, the operating expenses do not include Dr. Sibley's salary nor that of a half-time pediatrician who comes in from Pusan every week. These charges are covered by the World Council of Churches in Geneva. The project has 3.5 on clinical staff, 3 nurses, 1 laboratory technician, 11 nurses' aides, and 19 associated personnel, i.e., volunteer paramedics, government health workers, etc.

The project consists of a small rural health center with twelve inpatient beds; delivery room; outpatient department; emergency room; operating room; maternal-child health and family planning, public health, health education, laboratory and x-ray facilities. Dr. Sibley's main purpose is to demonstrate that it is possible to bring low-cost but comprehensive health care to a defined population of a rural area. Central to this is an expectation on his part that its successful elements might be incorporated in that aspect of national planning having to do with rural health systems.

The Koje-do project has been experimenting with a number of ways paramedical workers can be used in patient care. This has been made difficult by Korea's strict medical-legal codes that prohibit treatment by anyone other than a licensed physician. Dr. Sibley believes the effectiveness of a community health program will be directly proportional to the degree to which it can sustain an active, stimulating influence for health in every home in each individual village. Where health gaps are large, such as in Koje-do, this sustained influence can be best maintained by the constant physical presence in the village of a trained representative of a medical care team--a paramedical worker. When the chief of police in Koje-do heard about the paramedical program, he asked Dr. Sibley to train a medic from his staff along with others that were then in a training program as village aides.

Because a large number of residents in Koje-do depend on medicine bought on the advice of druggists for treatment when they are sick, the project is conducting periodic training sessions for island druggists. The sessions include basic health and treatment principles and stress the proper use of antibiotics, which are available without prescription, and the importance of following the progress of a patient. The project believes strongly that because of the shortage of health care resources, its goal should not be to convince everyone to come to the clinic for treatment, but it should try instead to find out what the abilities are of all indigenous sources of care, to train them further, and to use them where possible. Moreover, Dr. Sibley said that he has accepted legal responsibility for druggists who "lay hands" on patients. This is in reference to the common practice wherein the patient simply comes into a store, describes his ailments, and receives a drug from the pharmacists. His person remains inviolate in the process of treatment.

Dr. Sibley said his low-cost health care program has upset the other physicians on the island. However, there is a behavioral problem with low-cost health care: people tend to associate cost with quality. If the physical plant does not look attractive and somewhat costly, peopl will figure that low quality health care is available in that facility. FHC responded by saying that a beautiful facility for low income residents only will have poor utilization because of the target population. It has to appeal to a broad spectrum--low to high income in order to make it financially.

Dr. Sibley said that facts talk "turkey" in Korea. The Koje-do project, he commented, does not have the time, know-how and financial resources to put these facts together. He really can't analyze what the project is doing, or measure its direction and impact. Although the project is closely associated with the Pusan University Medical School, they have no analytical capability to help him on this problem.

On the question of the in-coming shipyards for Koje-do, he said the companies would build primary care units but would not own them. He does not plan to move into prepaid insurance with shipyards, but fee-for-service will be employed. He said the Korea Community Medicine Corporation proposal for industrial estates would only include M.D.s. The FHC team commented that this proposal and the concept is dependent on:

1. The shipyards being built.
2. No competition.

Dr. Sibley thought the most difficult concept to sell is going to be primary care. Again, there is a behavioral problem presently expressing an interest for referral hospitals and secondary centers. He said that Korean medicine is a traditional western approach transplanted to Korea.

Observation: This is a fine program in need of analytical support from an outside resource. Dr. Min, from the Ministry of Health, is aware of the paramedical and druggists program, and says the Ministry permits it because it is worth following and studying to determine its impact. The FHC team seconds that decision.

MEMORANDUM FOR THE FILE

DATE: May 14, 1974

SUBJECT: Field trip and interview with Dr. Chung, Director of Pusan Blue Cross, Gospel Hospital, Pusan

Dr. Chung said the Ministry of Health designated the Pusan Blue Cross as a pilot cooperative on September 26, 1969. This was the first urban program to be approved by the Ministry. The criteria for membership is:

1. Resident of Pusan
2. Support goals of co-op
3. Enroll all household members

To join, ₩200 per person per month is required as a premium fee. The one time entrance fee is ₩1,000. The Ministry of Health pays a subsidy of ₩150 per household per month. At the present time, 14,903 people are members of the Blue Cross. Their membership for the past four years shows:

| | |
|---|---|
| 1970 | 13,730 |
| 1971 | 11,797 |
| 1972 | 13,172 |
| 1973 | 14,557 |

When the Blue Cross first began to enroll members in 1969, Save the Children's Foundation heavily supported enrollment with its membership. The drop after 1970 was due to the Foundation's loss of support. The present enrollment is primarily low income, though 10-20% are in the middle high income range. The Pusan Blue Cross has a staff of 8, of which 2 are involved in marketing activities. Their premium collection rate among members is 85%.

The Blue Cross budget during the past several years demonstrates this experience:

| | Income | Expenditure |
|---|---|---|
| 1969 (4th Qtr.) | ₩ 5.2 million | ₩ 5.7 million |
| 1970 | ₩28.6 million | ₩28.7 million |
| 1971 | ₩37.4 million | ₩37.4 million |
| 1972 | ₩44.6 million | ₩43.7 million |
| 1973 | ₩43.5 million | ₩43.9 million |

Their 1973 income of ₩43.5 was derived from:
34.6% Blue Cross premiums
7.5% National subsidy
34.6% Hospital discounts
3.6% Entrance fees
19.7% Partial payment by members

Dr. Chung was asked how he felt about enrolling groups. He said the Shell Oil Company joined on an individual basis. If 50% of the employees would have joined, however, the company would have had to pay one half the premium costs. Dr. Chung felt that low income groups have low utilization of hospital facilities. He was asked by FHC what would happen if benefits increased? Would more high income people join? He responded by saying they probably would. Also, if the hospital was more accessible to them, they would join the program. Blue Cross does not contract with any other hospital in Pusan than Gospel. In fact, about 90% of all Blue Cross income goes to Gospel. FHC asked if the hospital staffed the insurance program. Dr. Chung said that out of 140 employees, 140 joined, including dependents! He felt the employees utilized the hospital services too frequently.

Blue Cross plan members have a morbidity rate of 11.4% annually and are responsible for 28% of total Gospel Hospital visits. Dr. Chung says this comes out to be an 0.4% morbidity rate daily and a 1.1% daily hospital utilization (patient and inpatient). The income from the Blue Cross constitutes 10% of total Gospel Hospital income on an annual basis. Gospel has 150 beds of which 80 are occupied daily. On the average, fifteen of these are filled by members of the Blue Cross. Outpatient visits average 3,300 per month.

Observation: Dr. Chung appeared to be an able administrator and organizer. He felt a national federation was needed to expand and promote the concept of medical insurance. While it might be too early to do this now, he thought the need would soon arise for such a federation.

MEMORANDUM FOR THE FILE

DATE: May 15, 1974

SUBJECT: Field visit and interview with Mr. Oh, Soo Man, Chief, Public Health and Social Affairs Section, Cheju-do Provincial Government

FHC asked Mr. Oh for some information on the local Blue Cross plan in Cheju-do. He said Blue Cross was under investigation for possible misuse of funds. All their marketing and program activity has been suspended pending the approval or disapproval resulting from the investigation.

MEMORANDUM FOR THE FILE

DATE: May 15, 1974

SUBJECT: Field visit and interview with Mr. Han, Choi Byeong, Vice-Governor, Je-ju Provincial Government, Cheju-do

Mr. Han said the life expectancy on Cheju-do Island was high. Of the 400,000 residents, 0.9% were over age 80. This contrasted to 0.16% in Seoul. He hoped we could help Cheju-do obtain better hospital facilities. As things were now, he said there were better physicians than hospitals on the island. Some of these M.D.s are residents from Seoul National University.

The meeting was abruptly terminated by an air raid drill.

MEMORANDUM FOR THE FILE

DATE: May 15, 1974

SUBJECT: Field visit and interview with Dr. Kim, Byong Chan, Director, Provincial Hospital, Cheju-do

Dr. Kim said the hospital was built in 1910 by the Japanese. In 1971, a sub-hospital, of 15 beds, was opened on the other side of the island. The main hospital has 53 beds and a staff of 47. In 1973, 38,300 patients* used the hospital and another 2,700 were charity cases. Dr. Kim said that 95% of those using the hospital paid all charges in full. He said that 70% of the cases are Workmen's Compensation.

The hospital is operating a mobile clinic and it is making visits to rural areas primarily on instructions from the national government to get in line and support the Saemael movement. Over 1,437 visits were made by the clinic last year.

The 1974 budget is ₩110 million and 97% of that must be raised by the hospital. Of this, ₩88 million has to be earned from medical services. The proposed expenditures on this budget are:

34% salaries of staff and physicians
26% medical supplies, drugs, etc.
27% hospital maintenance
3% mobile clinic and dental
1% non-chargeable expenses
4% for purchase of medical equipment
5% miscellaneous

Of the 9 M.D.s on the staff; 6 are in the six month resident program, 1 is a dentist, and the other 3 are full-time residents. Dr. Kim said that the grade of residents has become lower in the past few years: the hospital how gets 3 or 2 year residents instead of the 4 year M.D. He feels their salary of ₩200,000 should be increased to ₩350,000. Non-board M.D.s now are salaried at ₩160,000.

* Out-patient and In-patient

Dr. Kim said the hospital was old, in need of equipment and renovation. Difficult medical cases have to be sent to the mainland for care, but often the weather is bad and patients have to take their chances in a hospital not equipped to handle their needs. His first priority is to make this provincial hospital a first class institution, and expand the facility to 150 beds. His bed occupancy rate in 1973 was 70%. The hospital takes its patient population for a low-middle class income group.

FHC asked Dr. Kim if he would consider operating the hospital on a contract. That is, contract out to the private sector for management and administration on a nonprofit basis. He said if there were enough facilities, this could be done. But he could not recommend it at this time. This has been done in Inchon, according to Dr. Kim. The Director of that hospital is no longer an employee of the Government. He used the property and equipment as collateral on loans, and Dr. Kim was unsure of the propriety involved in that kind of transaction. FHC replied that the idea was to lease the facilities, not give them away. The Government would have to make sure the hospital could attain self-sufficiency and economic viability through increased utilization. Dr. Kim then said that a contracting arrangement will result in taking in patients who can pay, leaving out the poor. FHC replied that production is related to unit of service. In a nonprofit hospital, the profits should go to increased services for patients. The team then asked if a first class facility would attract first class patients. Dr. Kim replied that treatment is now low quality. The hospital does not match the rate of economic development in the country. FHC then posed a hypothetical question: If it had the wherewithal to grant or loan funds, would you invest in this facility? Dr. Kim said yes. If this were a private hospital, wouldn't you have to reconsider serving a low-income population, FHC asked? Dr. Kim said yes, but he would have to alter the rate at which he charges in that case. His policy then would be to collect money as fast as possible from the high income group.

The team was taken on a tour of the hospital.

Observation: Dr. Kim was an excellent host. The FHC team has no wish to be critical of people doing the best they can under difficult circumstances. But it was difficult to observe basic public health policies in the operation of the hospital. With a budget of ₩110 million, there certainly has to be an allocation for soap powder.

MEMORANDUM FOR THE FILE

DATE: May 15, 1974

SUBJECT: Field visit and interview with Dr. Suh, Song, Director, South Cheju-do County Health Center

Dr. Suh studied public health and public health administration at Seoul National University. He feels, quite strongly, that the weakest point in the Korean medical care system is delivery and administration. He said that the health sub-center is considered last in terms of importance in Korea, yet it is the first point of entry for patients. Transportation is not a problem--it is lack of equipment, finances, and public health education among the people. The people just don't know where to go so they end up visiting a druggist when the feel ill. Dr. Suh said that if you look at medical service as an enterprise, then it is now a monopoly on the part of providers and most druggists. He observed that there ought to be at least a referral service at the county level to keep moving patients to where they can be treated.

FHC asked him how he would feel about services. He agreed with this concept but did not know if patients could pay the costs. Was this an economic or behavioral attitude on their part? Both, said Dr. Suh; about 10% can afford to pay and other 90% simply can't pay. He said people were not aware of the need to visit a physician. Many never have had x-rays. A subsidy would be necessary to ease the people into a contract program.

FHC asked what it would cost the 10% to have contract medical services. Dr. Suh said ₩10,000 per household per month. Last year he conducted a survey among 2,800 households containing 13,600 residents. He found an 18.9% morbidity rate. Of those in this category, 54.8% went to drugstores; 20% to provincial clinics or private M.D.s; and the remainder to herb doctors, etc. He was asked by FHC if pharmacists should be used in a primary care system. Dr. Suh said no, they should be kept separate in terms of service delivery

The FHC team was then escorted across the street to the sub-hospital and given a tour of the facility. Many staff were observed. No patients were seen, anywhere.

Observation: Dr. Suh should be given some assistance to continue his examination of health delivery in areas such as Cheju-do. He knows the right questions and he's searching for answers.

MEMORANDUM FOR THE FILE

DATE: May 15, 1974

SUBJECT: Field visit and interview with Mr. Oh, An Soo, Assistant Manager, National Agricultural Cooperative Federation, South Cheju-do County Agricultural Co-op

Mr. Oh said the NACF plan for medical facilities to federation members does not apply to Cheju-do because it is an island. The co-op now contracts with an M.D. for basic services under their mutual insurance program. However, this appears to be a very limited arrangement, i.e., death certificates.

There are 25,000 heads of households in the co-op or some 110,000 people. The county co-op has 9 primary co-ops at the Myon level. Of the 25,000 households, 23,000 are farm families.

Mr. Oh said members are using the co-op bank for savings at a high rate. Last year they had 1.1 billion Won in savings and this year it is up to ₩1.32 billion. Members also purchase stock in the co-op. The entrance fee into the co-op is one stock valued at ₩1,000. The average stock held by members is 15-16 shares.

FHC asked Mr. Oh if there was any interest on the part of membership in medical insurance plans. Mr. Oh replied that the members would follow whatever direction was established in Seoul on matters such as this. If the Federation supported the concept, could you collect ₩200 per household per month, FHC inquired. Mr. Oh replied that 80% of them could pay that premium. The fees could be collected by the Chairman of the village associations.

He was then asked if it made sense to have a separate medical co-op. Mr. Oh replied that this would depend on what policy makers at the Federation level had to say. It would probably require a change in their charter, though. FHC inquired if the co-op can operate a "sister co-op" for medical care services. Mr. Oh said they would have to hire their own M.D., and this would

be better than what is now in the system for quality assurance. In response to a question on contracting for services, Mr. Oh said he was not aware of the benefits of this idea but the plan sounded like it had merit.

Mr. Oh then went back to an earlier question and said that perhaps the figure of those able to pay ₩200 per month may be less. First, he said, it would be better to enter a program of this nature on a pilot basis. FHC asked him if he would be willing to sponsor such a project. Mr. Oh replied that this project should be in a rather remote area. A high quality M.D. would have to be in the demonstration project or utilization would be low. Otherwise, people would not be willing to pay for a system they had no intention of using.

Observation: This county level co-op, a member of the NACF, appeared to have good management and administration skills in place.

MEMORANDUM FOR THE FILE

DATE: May 21, 1974

SUBJECT: Interview with Carroll B. Hodges, Ph.D., Director, Operations in Korea, The American-Korean Foundation

Dr. Hodges detailed the contribution by AKF to the emergence of modern Korea from the day of its relief activities, until its participation in its econmic recovel

AKF has an interest in the successful and viable operation of rural health services and had made contributions in Korea to this end.

The agency is identified with Seagrave Hospital in Okgu, with the Koje-do project and with Dr. Chung in his efforts to develop a Blue Cross. He mentioned the need to recruit an American M.D. for the Okgu project. He was having difficulty because of the funds required, but now hoped that an M.D. from Ireland might take on the job.

Dr. Hodges hoped that AID might assist in the support of these groups.

Observation: Why does the Okgu project need a high priced Western M.D.? Won't he need expensive equipment, etc., etc.!

MEMORANDUM FOR THE FILE

DATE: May 22, 1974

SUBJECT: Interview with Dr. Chung, Hi-Sup, Member of National Assembly, Public Health and Social Welfare Committee

Dr. Chung said he has obtained $1.5 million fundin for hospital construction in the Koje-do project from European sources. The building program will be started in July and should be finished in early 1975. He has also raised other funds (undetermined) from U.S. Pew Foundation for construction purposes.

He felt that a primary care program associated with a well equipped hospital would attract idealistic M.D.s to the overall program. In fact, he is looking forward to beginning an internship program in Koje-do project when the hospital is completed. As to Dr. Sibley's project on Koje-do, he said utilization has increased 30% over 1973.

Dr. Chung did not feel a fixed fee or insurance was the answer to making health services available to Koreans. He felt it should be something in-between but he was not sure just what that might be at the moment. He commented that most of the problems in health care delivery evolve around management, administration and organization for an effective delivery system.

He was asked by FHC where health delivery studies and research might be conducted. He thought Pusan University Medical School could take on this program but it would need research funds and some institutional building funds. Too, he felt the Korea Community Medicine Corprotation would enter into the hospital contract field next year by contracting for the operation of one provincial facility.

Observation: Dr. Chung impressed FHC as a man who could get things accomplished. Unfortunately, his efforts are not part of a centralized national plan. He is very much involved with the Seagrave Hospital in Okgu. That hospital is now looking for a Western M.D. and his eventual arrival

will herald the need for sophisticated medical equipment. The Okgu Blue Cross plan will have to increase premium costs to support these outlays. Will the same thing take place in the other hospitals Dr. Chung is raising funds for at this time?

MEMORANDUM FOR THE FILE

DATE: May 22, 1974

SUBJECT: Interview with Mr. Choi, Byung Hang, Manager, Research Section, National Agricultural Co-operative Federation, and Mr. Suh, Won-Ho, Chief, Marketing Research Section, Research Department, NACF.

The FHC team wanted to meet with the NACF again to get a better feel for their activities in the health services area. We inquired again about the number of clinic dispensaries the Federation was operating. In the May 7 meeting, they said 260 were delivering services, However, that figure was off the "top of their heads" at the last meeting. They dispatched an aide to get the actual numbers this time and they are:

214 clinics, of which
166 are operating, and
48 are closed
138 full time MDs
28 part time MDs
166 nurses

The team asked the NACF if they would have any interest in sponsoring pilot projects with member cooperatives for the delivery of medical services. They said the President of the NACF might be interested, but they felt the emphasis had to be put on increased agricultural production because they couldn't spare their efforts for medical services. Yet, the NACF would be willing to study the concept of pilot projects in this field. They asked what the insurance premium would be per member and the types of MDs needed for such a system. But they did not feel that Korea had enough MDs for such a system.

FHC responded by saying there may not be enough physicians for the next 25 years if the country continues to utilize them in their present capacity. To achieve its goals in the 1980s, Korea will have to act now. If the country waits, then all that is being done now in terms of health care services will have to be undone at

a high cost. Health care can't be demanded of people. They must take care of themselves because they want to: they can't be coerced into that. The best health care is a mother properly caring for her child, bathing that child, boiling drinking water and teaching personal hygiene. If this is not done, the child gets ill and the personal cost of health care begins to increase. The NACF is in a position to help its members understand this concept and to spread the risks of medical care throughout the entire Federation. The NACF responded by saying this was a constructive suggestion and that they now had a better understanding of what was meant by the concept of health care as an economic investment opportunity.

Observation: The FHC team gained the impression from this meeting that the NACF's interest in sponsoring more comprehensive medical services for its members was definitely on the increase. Further, the Federation does have the institutional structure to begin this process once their own leadership becomes educated to the merits of providing medical services to members through the primary and regional cooperatives.

Note: The team left this meeting with the feeling that the 166 physicians were working directly for the NACF. Independent evidence later given indicated this was not the case. The physicians are recruited and paid by the Ministry of Health and Social Affairs. The NACF does not give them any compensation above their salaries as government providers.

MEMORANDUM FOR THE FILE

DATE: May 23, 1974

SUBJECT: Interview with Dr. Tong Kwan Hong, Director, The Korean Institute for Family Planning, Seoul

Dr. Tong felt that a trend was beginning to develop in the private sector for an increased role in health care. The Korean Medical Association, for one, was fostering this development and he felt private sector activities would continue to be demonstrated by other entities as well.

The Institute for Family Planning has family planning workers in 196 health centers throughout the country. He said that the "Mother's Clubs" were originally started for family planning purposes. He felt a link was needed between the public sector and other health resources that ultimately feed into it. Then, services could be expanded and more people served than is the case now.

Dr. Tong stated that as economic differences became sharper and expectations of Koreans moved upward, the poor and low income citizens would undoubtedly lose out in terms of accessiblity to health services.

Observation: Dr. Tong expressed an awareness and need for change in the present health system.

MEMORANDUM FOR THE FILE

DATE: May 23, 1974

SUBJECT: Interview with Dr. Choi, Young Tai, Professor, Catholic Medical College and President, Korean Industrial Health Association, Catholic College Seoul, Korea

The Korean Industrial Health Association was formed in 1949. It was inactive during the war but was revived and now has about 800 members. Because of increasing industrial development and the participation by foreign financed operations in occupational health, the KINA expects its membership will rise 50% this year to 1,200 members.

Dr. Choi said the Association is composed of practitioners "committed to sounder industrial health practices in industry. Industrial medicine is only possible with the cooperation of management, labor and the medical professional.

Dr. Choi made it clear that the drive for industrial health services has come from the Office of Labor Affairs in the Ministry of Health. The industrial health activities are legally approved by the Ministry of Health and supervision inspection and reporting is through the Office of Labor Affairs.

Dr. Choi, who has been president of the Association for 10 years and is a graduate of the University of Minnesota School of Public Health, stated that 90% of the membership is involved in occupational medicine only part-time. However, the association itself is under contract to serve certain multi-employers, and physicians and others in these contracts are full-time. In full-time situations, productivity doubles. Dr. Choi recommends a strategy of using industrial health services as a springboard for community health.

He cites as a justification for this position a coal mining area which he personally served as an industrial health physician. There he uncovered a 4% incidence of tuberculosis, which in seven years he reduced to .007%. He believes this would not have as likely occured if his activities had begun from a community-medicine base.

To further illustrate his point, Choi cited the Associations experience in contracting for multi-plant services in six industrial areas, with two additional areas expected soon. These areas are Pusan, Kwang-Ju, Inchon, Masan, Yongdongpo and Seoul's garment center.

The Masan Center operated by the Association serves as a worker population of 25,000, 90% of whom are single females. A ₩50 million allocation was made by the Minister of Commerce to the Association to construct a three story building for which the Japanese Government supplied ₩66,000,000 for equipment and furnishings. The Center operates on a budget of ₩85 million, of which ₩70 million is derived from a contribution by the employers at the rate of ₩220 per worker per month. ₩15 million is derived from fee-for-service collections and Workmen's Compensation. Of the ₩15 million less than 2 million came from Workmen's Compensation.

The monthly 220 per worker per month permits the Center to guarantee to the worker complete care including emergencies, drugs, hospitalization, consultations and medical services at no cost to the patient. If the dependent uses the facility, the cost is 50% of a schedule of charges.

Of the 70,000 visits, 35,000 were mandated by law: routine health exams, etc. and the balance of 35,000 represented the demand placed on the system for other than mandated services.

The staff is composed of 23 professionals and 30 support and maintenance persons, for a total of 53. Among the 23 professionals are six physicians, two pharmacists, 9 R.N's and the balance X-Ray, Lab., psychologist, et al.

In addition to providing patient treatment, the Center is responsible for and routinely checks problems of pollution, occupational hazards, etc.

A 5-bed hospital which is maintained by the Center requires expansion although the surgeon who earns ₩250,000 per month finds his principal procedure involves hand repair.

Because the health center is located in the Masan free port area, and workers are 90% single, there has not been a great demand for dependent benefits, but Choi nevertheless believes it is from the industrial base that dependency coverage efforts should start.

Other Association centers have physicians reimbursed on a fee-for-service basis, but the value of the Masan approach of capitated contribution has been proven as better according to Choi.

Because of this, Choi stated that a new facility is to be erected in Iriev for which the Ministry of Commerce is recommending to the Korean Assembly legislation to authorize ₩83 million, and the Japanese Government has stated it is allocating monies for its share in the equipping of the facilities. The analysis of incidence of conditions treated at Masan, as well as other data will be forwarded to us.

Consideration is being given by the Association to formal links with the Medical Schools to have the Schools monitor the quality of work done by the Association.

Observation: This is the largest capitated service program FHC has found in Korea. The Japanese are supporting the industrial estates in a manner quite consistent with the Japanese domestic pattern. There may be burgeoning problems of a severe sort among differing business approches to health issues - Japanese collectivism; U.S. industrial co-operation and exchange of information but individual company action; and Korean resistances both individually and collectively to involvement.

MEMORANDUM FOR THE FILE

DATE: May 23, 1974

SUBJECT: Interview with Thomas V. Miller, Director, Korea Office, Asia-American Free Labor Institute

Mr. Miller, to whom we had been referred by AFL-C and Asia-American Free Labor Institute in Washington, confirmed previous reports we had received that his assistance focused on education, health and recreation matters among the Korean unions. The memberships view health problems very seriously: they don't want to get ill because of income loss. Any "market" approach has to emphasize the better ability to keep working through health measures.

The A-AFLI program in Korea started only about two years ago and has provided assistance to various local labor unions in promoting the welfare of laborers. The A-AFLI is giving financial assistance to some unions in establishing nonprofit labor union medical clinics throughout the country. Currently, three clinics are operated by unions in Cheju-Do, Mokpo (for dockworkers), and Seoul (for garment workers) but they are not doing very well. Each clinic is manned with 6 staff members, including M.D.s, nurses, and the clinics provide service to both members and community at large. Mr. Miller suggested that it would be worthwhile to visit with Dr. Choi, Young Tai, President, Korean Industrial Health Association for further information on industrial health programs. He said that the association is operating 8 industrial health clinics throughout the country and may be of assistance to the FHC examination. Further, there is some consideration of working with Drs. Sibley and Chung in Koje-Do. Miller has met Chung and found him impressive. Miller is conscious of the hospital edifice problem and wants to talk to Sibley to assure that Sibley's wishes dominate the situation.

Miller advised us to meet with Dr. Choi of Korean Industrial Health Association and Mr. Suh, Kwang-Sun of the Korean Association of Voluntary Agencies.

Observation: Any central agency which undertakes a directional role will have to publicize its activities so that well-intentioned supporters of individual programs are cognizant of broad goals.

MEMORANDUM FOR THE FILE

DATE: May 23, 1974

SUBJECT: Interview with Dr. Kwan-sup Han, Director, National Institute of Health, Seoul

The NIH was created ten years ago as a multipurpose institution: training, epidermological control and drug control. Dr. Kwan said the functions of NIH are basically a routine laboratory program and its staff teaches health workers from around the country. In response to a question, he felt this was the right time for health care extension to more Koreans, and for health insurance.

It was his feeling that at least 70% of the people go to a pharmacist for primary health care. He was concerned with the overutilization of drugs but even more concerned that the people were building up immunities through consistent usage as most of the drugs sold are antibiotics. The only record kept on drug sales if for poisons and narcotics.

The NIH does not reject the idea of making pharmacists part of the health system. But he is a licensed professional and he does want a separate identification.

FHC asked Dr. Kwan how it would be possible to get all health factions in Korea to work together toward a common goal. He responded by saying that 20 years ago WHO and AID started health programs in Korea. Korean entities who were subsequently engaged in these efforts all began to go their own way and became corporations unto themselves. The fragmentation you find today is the result of individual entities building their own separate institutions with their own private constituences. Korea should now begin a process of multipurpose health workers in a comprehensive program.

Dr. Kwan approved of Dr. John Sibley's project in Koje-do and said the team approach to health care was a good idea. He felt Korea should go the private sector route with ownership of public health facilities. A program that serves only the poor, he observed, ends up being a poor program.

He is interested in consolidating health services. Dr. Hwan said Korea should begin to consolidate health services. One result might be a reduction in the "brain drain" among health professionals if there was a national institution to attract quality staff.

Observation: Dr. Hwan was supportive of a centralized health effort but did not see the NIH as having the structure to provide it for Korea.

MEMORANDUM FOR THE FILE

DATE: May 23, 1974

SUBJECT: Interview with Dr. Kim, Mahn Je, President, Korea Development Institute, and Dr. Koo, Bon Ho, Research Director

On this return visit, FHC wanted to explore with KDI their possible interest in acting as the sponsor for a centralized private-public sector effort to organized a health planning and delivery capacity in Korea. The basic FHC findings were discussed and then Dr. Kim was asked if KDI could see itself as the originating structure for the new health corporation during its formative years. He said KDI has accepted a rather similar role through the Government for policy formulation and program implementation on a UNDP population problem. Their principal function is to act as a secretariat and mediator in this undertaking. He was somewhat wary of having KDI involved in the FHC recommendation until it was explained that no "tight" tie was envisioned between the proposed health corporation and the Ministry of Health. There would be a formal link to the Ministry but KDI was not to report or be responsible to MHSA. Dr. Kim's attitude then changed and he said KDI would be happy to participate in this endeavor if the ROKG invited the institute to take on the responsibility.

He then asked about the role of consultants. FHC said it was probably going to recommend a resident capability for the corporation for a period of at least one year. Dr. Kim responded by saying he found it best to have consultants come in midterm to check progress, and at the end for program evaluation and analysis. While Dr. Koo was not in complete agreement with this method, he said it would be important to have consultants in at the beginning so KDI could get a good start on the project.

MEMORANDUM FOR THE FILE

DATE: May 24, 1974

SUBJECT: Interview with Mr. Eun, Thin Tant, General Manager, Administration Office, Pohang Iron & Steel Co., Ltd.

FHC wanted to visit Pohang because it understood that 30,000 workers were covered under some sort of insurance plan. Mr. Eun assured us that Pohang had only 4,500 employees and while the company operated its own clinic on plant grounds, no medical insurance plan was in force. And, he knew of no plans to consider such an idea in the future. Pohang presently provides recreational facilities for its workers, in addition to the clinic, and there is the compulsory Workmen's Compensation, but nothing else.

MEMORANDUM FOR THE FILE

DATE: May 24, 1974

SUBJECT: Interview with Mr. Kwang-Sun Suh, Director, Korean Association of Volunteer Agencies

KAVA had been suggested to us by the A-AFLI representative.

The agency brings together 63 organizations, of the 85 voluntary agencies, both domestic and foreign, resident in Korea. It engages on behlaf of the agencies in interpretation and coordination. For example, it will soon conduct its annual conference, at which a discussion will ensue about the direction of Korean medical services. This is viewed as intelligence gathering.

In general, the impression received was that KAVA was an agency which saw its role as responding to its constituencies, rather than leading. As such it does conduct surveys, and the like.

MEMORANDUM FOR THE FILE

DATE: May 24, 1974

SUBJECT: Interview with Mr. Park, Sung Chan, President, Gold Star Company, Ltd., Seoul

FHC wanted to discuss health care as an investment with a leader in Korea's commercial community. Mr. Park said investment in health care is not a total waste. Korea did not make it before not because it wasn't important but because it could not afford the costs. However, health care is as improtant here as it is anywhere else in the world--but Korea will make the investment when it can afford to do so. He disagreed that Koreans do not understand the importance of this investment: they can handle the concept but not the expense.

Mr. Park thought it was important to educate and train management in Korea before providing health care. That is, there is a need to develop human resources prior to investments. Employees are becoming very active on health issues and management is spending more funds in response to this activity. He said health care, from a corporate standpoint, was as important as fixed assets and hardware. The efficiency of the plant comes from both the skill of the employees and their good health. But, Korean business sees medical care today as a separate industry, really a cottage industry.

He was asked how Korea could get the greatest effectiveness from its health investment. For instance, might it concentrate its resouces in an organizationl capacity, like KIST (Korean Institute for Science and Technology)? Mr. Park thought this was an appropriate use of resouces depending on staff and their qualifications. He said you could convince the business community that a centralized effort should be implemented. The business community, he said, is very receptive to new ideas... "you could convince us".

Observation: Mr. Park was himself very convincing.

MEMORANDUM FOR THE FILE

DATE: May 25, 1974

SUBJECT: Interview with Mr. Dick Brown, United Nations Development Plan, and Dr. David French, United Nations Family Planning

FHC met with these gentlemen to test some ideas on its findings without involving them in any of the specifics. Random thoughts follow: Dr. French felt that family planning should be integrated in the total health care system--but still retain its priority. He felt the important positions in government were being held by economic types. They both thought KDI was a solid institution and that EPB got substance from them. Rather than resident consultants in Korea, they felt the visiting team approach was best. Koreans have good skills--just show them the way. They felt the North/South differences in health care delivery were real and could be effectively employed to move the ROKG to improve the present health system.

MEMORANDUM FOR THE FILE

DATE: May 25, 1974

SUBJECT: Interview with Mr. Mitoji Yabunaka, Second Secretary, Embassy of Japan, Seoul.

Yabunaka said Japan has provided funds to the Catholic Medical University which in turn has used these funds to assist the Industrial Medical Center in its activities with the Masan Industrial Health Service Center. In 1973, this funding of $750,000 was for medical equipment. Another $35,000 was provided to the Korean Green Cross Corporation through the Overseas Technical Cooperative Agency.

FHC asked if the ROKG required Japanese companies to commit funds for medical equipment and facilities to Korean based firms as a prior condition to licensing procedures. He said it was not compulsory, but that his government encourages firms to do this for political reasons, as well as to increas productivity.

Mr. Yabunaka said Japan was considering funding for a "huge" medical center in Seoul and some dozen small sized hospitals throughout the country.

MEMORANDUM FOR THE FILE

DATE: May 25, 1974

SUBJECT: Interview with Mr. Park, Sung Ho, Associate Director, Cooperative Education Institute, Seoul

The Cooperative Education Institute started in Maryknoll Hospital Clinic in Pusan in 1962. It moved to Seoul in 1963 and used rental facilities in a small house. Permanent quarters were started in 1964. The Oxfarm Foundation in England gave capital construction funds in 1966 and the German Bishop's Fund gave monies to complete the building in 1968.

From the beginning, the Institute charged its trainees all costs--food, tuition, quarters, etc. The German Bishop's Fund has since made a substantial contribution which allows the Institute to subsidize the operation and only charge trainees about 15% of total costs.

In 1969, they established an extension office in Koje-do with Dr. Sibley. The Institute has 16 staff members, 5 of which are in the extension office. At the time of the visit, 26 trainees from around the country, including some military personnel, were taking a course in cooperative leadership training. Mr. Park said his institute trained the leaders for the National Federation of Credit Unions.

The Institute has a capacity for housing and training 50 students. The building is of structural steel and brick construction, containing well lit classrooms, dining hall, office space, audio-visual aids, dormitories and 2-man rooms. Although 50 students is the resident limit, the Institute has had as many as 92 at one time, using split shifts in the dining halls and farming out students to the nearby community for lodgings.

The basic leadership training course in cooperative principles is 4 weeks, though some have been for an 8-week period. Also, refresher courses are given twice yearly. The cost to trainees is ₩2,500 weekly (the German Bishop's

Fund covers the other 85% of total costs). The Institute maintains close contact with its graduates which now number some 3,000 around the country.

The Institute is interested in medical insurance--it helped to draft the Medical Insurance Law. In terms of the cooperative movement, Mr. Park felt that medical cooperatives should be separate legal entities. The most important aspect of developing these cooperatives was the education of non-members to the concepts of medical insurance. He said you have to change people's attitudes. Overall, he felt any cooperative institution has to be based on Korean intelligence and Korean skills. The Institute wants to work within the existing Korean structure to affect change.

Observation: The Cooperative Education Institute has the facilities, staff, experience and willingness to conduct training programs in the organization of medical care cooperatives.

MEMORANDUM FOR THE FILE

DATE: May 25, 1974

SUBJECT: Interviews with Dr. Min, Chang Dong, Director, Medical Affairs Bureau, Ministry of Health and Social Affairs (conducted during field trips on May 13, 14, and at lunch on May 25)

Dr. Min accompanied the FHC team on field visits to Okgu and the Seagrave Memorial Hospital; Dr. John Sibley's project in Koje-do; and the Pusan Blue Cross at Gospel Hospital. The following is a random record of observations from discussions during the field trips and also the last conversation which took place during lunch on May 25:

1. The Ministry of Health is paying ₩ 50,000 per month to private physicians serving public patients. This is a flat rate and is not based on number of patients seen.

2. The Ministry is not supporting the concept of "limited physicians". They are licensed by the Ministry to work in a limited area (geographic) and the government does not wish to give them more medical training or to increase their numbers.

3. The Ministry is not thinking of expanding the Blue Cross system.

4. The Ministry has a proposal to control the salaries of physicians, but it has not acted to legally implement it at this time.

5. There is a great deal of interest in medical insurance by the Korean medical society.

6. He saw no problem with Blue Cross and cooperative-forming medical insurance groups or medical cooperatives under the current Medical Insurance Law.

7. North Korea has 260,000 health personnel in the private sector and 10,000 in the public sector.

The outcome of medical services is better in North Korea. He felt health services were more effectively distributed, expenditures are less, and quality is better in North Korea. If the current discussions between North and South culminate in meaningful relationships being reestablished, then the health schemes of both must be compatible.

8. The idea of contracting out a public (provincial) hospital to the private sector to operate on a profit basis is difficult to see now. He does not believe the public health sector could operate an insurance scheme such as the one in Seagrave Memorial Hospital. But, he did think that Seagrave's could be replicated elsewhere in the private sector. (FHC replied that the American-Korean Foundation put up the front money for the hospital and the managers now see no need to amortize that debt over time. The experience may not be replicable unless that factor is considered.)

9. Fifteen percent of all hospital patients must be charity cases by law. (Formerly, it was 30 percent.)

10. AID has established a hospital construction loan fund through the Economic Planning Board. These loans are available to both the private and public sector, including nonprofit organizations. Funds loaned out from EPB to the Ministry of Home Affairs are at no interest. For example, a new provincial hospital was constructed in Masan with a $400,000 loan from this fund. The schedule calls for the Ministry of Home Affairs to begin payments of $25,000/year in 1976 for debt amortization. These payments go to EPB which has the final responsibility to restore the original grant to AID.

11. Dr. Min thought it would be possible for communities to obtain loan funds from the Housing Bank for the construction of Cooperative Health Centers. These loans carry an interest of 12 percent annually.

Observation: Dr. Min impressed the FHC team as a knowledgeable and able administrator.

# APPENDIX A

## COST MODELS

The use of cost models, such as those presented in this Appendix, illustrate how management planning tools can be offered by the proposed Korean Health Development Agency at both the macro and micro level to potential clients. While they are theoretical, their usefulness in this report is solely to demonstrate how policy decisions can be formulated on pragmatic grounds and how economic processes can be instituted to determine production costs in health care delivery systems. Similar, but increasingly refined approaches can be drawn by a skilled resident staff from appropriate data.

### I. MACRO LEVEL

The health services production model outlined herein is based on FHC's past experience and approach in the examination of health systems in the United States. This methodologic approach has application elsewhere and has been tested against urban-rural low cost community health care systems. The identification and definition of the key variables of critical significance in Korea was initiated during the review of Korean health sector

information and a series of interviews conducted prior to arrival on the scene. During the first few days in Seoul FHC further refined the conceptual framework for the analysis as well as identified, defined, and weighed additional factors critical to health service production in Korea.

A. Basic Assumptions

1. The existing medical care delivery capacity in Korea is primarily in the private sector. Provincial, Gun and Myon level government facilities almost exclusively impact on the low income segment of the population, and these services are operated on a welfare basis. At the Myon level, the services are limited and categorical in nature.

2. The payment for services--both ambulatory and in-patient--is on a fee-for-service basis. Charges are determined by the unit of service provided. This is true for both private and public facilities.

B. Production Model and Key Variables

The health services production model employed in this analysis, as well as the key variables and nominal values for Korea, are listed below. The model employed is a simple one for a fee-for-service health production unit for ambulatory services (non-hospital in-patient).

| | | | | |
|---|---|---|---|---|
| Number of Visits | x | Average Charge per Visit | = | Production |
| Production | - | Uncollected Charges | = | Income from Services |

Currently, almost all medical service systems in Korea require by law a physician for each service unit or "visit". Although data is not available, FHC estimates that physicians employed in systems where both ambulatory (out-patient) and in-patient services are provided spend 70 percent of their time in out-patient services. Thus, the amount of physician time available to provide out-patient services is .70 x number of physicians employed = Full-Time Ambulatory Equivalents. Assuming physicians work the same as others in Korea, then approximately 44 manhours are available weekly. The number of available mandays per physician per year is approximately 265:

| | |
|---|---|
| 365 | days in year |
| -15 | vacation days |
| 350 | |
| -1.5 x 50 | weekly |
| 275 | |
| -10 | holidays |
| 265 | available mandays |

The average number of physician mandays available for ambulatory services in any system is therefore: .70 x 265 = 185.5 days. Assume the physician can optimally see four patients per hour on an average, then: 185 x 8 x 4 =

6,000 visits/year. The 6,000 patient visits per year by a physician in any ambulatory setting can be used as a gross indicator of annual physician out-patient production in Korea. Currently, most Korean systems record and report the total number of out-patient units. However, they do not by and large distinguish physician visits from others. Caution should be used in any comparative analysis of delivery systems mainly on the basis of reported visits.

C. Cost of Physician Time

In attempting to determine grossly the unit of a physician visit in Korea, FHC used an annual physician compensation figure of ₩ 2,765,000 ($7,000). Physician compensation varies tremendously in Korea. The $7,000 figure is about what most salaried physicians are paid by both private and governmental institutions and considerably below what a number of physicians make on an annual basis. This figure is high, yet can be used as an average in this model. FHC attempted in a number of its discussions, including that with Korean Medical Association, to determine a gross competitive salary for a full-time salaried primary care physician. Most agreed $7,000 was the minimum. As will be pointed out in other sections of this report, the low level of physician compensation in a number of the existing health delivery systems is a major deterrent to

stable continuous programs. This is particularly true in rural areas. It is FHC's conclusion that the $7,000 figure is the minimum level of annual compensation around which any system can be built.

D. Cost Per Physician Visit

Assuming a physician compensation at $7,000, and assuming a salaried primary care physician spending 70 percent of his time seeing patients in the ambulatory (clinic or out-patient) setting can make 6,000 patient visits per year, then what will be the cost (not charge) of a physician visit? A rough estimate is as follows:

Physician Cost x 2 = Cost of Service

or $7,000 x 2 = $14,000 per physician

Available data in Korea does not allow an accurate calculation of costs other than M.D.s. By and large the systems are labor intensive, therefore, there is a higher ratio of supporting personnel costs, and the cost of drugs purchased and dispensed may be greater proportionately than one would expect in the U. S. where drugs are, by and large, prescribed. FHC is making a gross assumption that all other costs equal the cost of the physician for purposes of determining a gross indicator. Thus:

if an M.D. makes 6,000 visits the cost allocated to the 6,000 visits would be:

.70 x $14,000 = $9,800

the cost per visit would be:

$\frac{\$9,800}{6,000}$ visits = $1.60 or 640 Won per visit.

E. Cost of Hospital Beds

The cost of a hospital bed in Korea varies greatly from region to region and hospital to hospital. No good data is available to determine reliable in-patient cost estimates. FHC utilized total operating information from several hospitals in an attempt to determine reasonable estimates.

None of the hospitals examined separated the cost of operating their out-patient facility from that of in-patient beds, so it was necessary to take the total operating budgets and allocate a percentage to in-patient and a percentage to out-patient. Information obtained from Dr. Min at the Ministry of Health, and from Dr. Huh, Seoul National University, indicated the following ranges:

| | Out-Patient | In-Patient | Total |
|---|---|---|---|
| Provincial Hospitals | 55.7% | 44.3% | 100% |
| National Medical Center | 37.9% | 62.1% | 100% |

The total operating expenses in 1973 for four hospitals sampled were as follows:

| Hospital | # Beds | Operating Budget |
|---|---|---|
| a. | 65 | ₩ 112 million |
| b. | 12 | ₩ 31 million |
| c. | 100 | ₩ 360 million |
| d. | 53 | ₩ 110 million |
| TOTALS | 230 | ₩ 613 million |

Applying a 50/50 ratio between in-patient costs and out-patient costs, the average cost per bed is grossly estimated at ₩ 3,650 per day ($9.10). This was derived as follows:

Total operating budget x .50 divided by # of beds = 613 million Won x .50 divided by 230 = cost per bed operation expense

If the assumptions applied are reasonably accurate, the current cost per patient day in the hospital is somewhere in the range of ₩ 3,600 ($9.00). As mentioned above, the variations from hospital to hospital will be extremely wide and no data is currently available to determine what the range actually is.

Per Capita Costs:

In a system with:

- optimum physician utilization
- utilization of hospital beds at 1/6 U. S. average for the general population

Population = 3,000 people

Utilize M.D. on average of 2 times per year

2 x 3,000 = 6,000 visits

Cost of visits = 6,000 x 640 Won = ₩ 3,840,000

Hospital bed requirement 3.6 or 1,314 bed days available per year. Utilization will be approximately 1,050 days

The cost for hospital beds for the 3,000 people will be:

1,050 beds x ₩ 3,650 = ₩ 3,832,500

Combined Ambulatory and In-Patient Cost

3,000 people = ₩ 3,840,000 ambulatory
₩ 3,832,500 hospital
₩ 7,672,500

Per capita expenditure:

$$₩ \frac{7,672,500}{3,000} = ₩ 2,558 \text{ or } \$6.40 \text{ per year.}$$

F. Hospital, Physician, Utilization and Population Ratios

Having established gross parameters for the examination of ambulatory services, let us now turn to the production requirements for hospital beds. A number of assumptions have to be made as data is not available for a more definitive analysis. In order to maintain the unit constant, FHC attempted to estimate the number and cost of hospital beds which will be utilized by one physician at optimum production (6,000 visits) per year. Secondly, the size of the population unit required to maintain optimum utilization of the physician and the optimum utilization of

the hospital bed was determined.

The first assumption is that in Korea, for the foreseeable future, it will take a larger population base to produce 6,000 physician visits per year than is the case in most industrialized countries because of:

1. The continual heavy utilization by the population of traditional forms of medical care.
   a. acupuncturator
   b. herbalist
   c. shaminism
   d. herb doctor
   e. midwives

2. The heavy utilization of pharmacists

3. The relative high cost of physician services despite the evolving insurance programs.

4. The Korean attitude, although changing, being that the physician and the hospital are the last line of defense.

FHC arbitrarily established a conservative population estimate of 3,000 per fully utilized physician. This is approximately three times the population size served by fully utilized physicians in the U. S. For instance, the Kaiser prepaid health plan has a ratio of one to 1,100. If you arbitrarily say that the rate of hospitalization by a physician is one half the U. S. usage (2.4 beds/thousand) for the population he is seeing, the immediate bed requirement in Korea would be approximately 1.2 beds per thousand population. Under this model, a fully occupied physician would require 3.6 hospital beds per year for every 3,000

people. A population of 100,000 people would need a hospital with 120 beds. At the present time, the rate is .48 per thousand or 48 beds available per 100,000 population.

## II. MICRO LEVEL

This cost model prepared by Dr. John Sibley of the Koje-do Project represents his estimate of the cost of a primary care program with adequate coverage for a population of 170,000 to 200,000 residents. Stage One includes:

A. Primary Care Section - First priority services and second priority services. This contains an outline of the services to be carried out in the primary care program, and the objectives and methodology to be employed.

B. Personnel Description - Personnel organization pattern and general outline of personnel distribution for an average population of 30,000. The plan calls for one primary care unit to be based in every two or three townships.

C. Stage One Budget (1975) - This is based on the coverage planned for the beginning of the expansion program. Figures represent full coverage of the island at 1974 expense rates and include only five areas of the island. Stage Two will include thirteen areas of Koje-do. (See D, Budget Totals By Stage)

## A. Primary Care Section

### First Priority Services

#### 1. Maternal Health

Target Population:
- First priority: High risk pregnant women
- Second priority: General population pregnant women

Target Problems:
- First priority: Infection
- Second priority: Anemia
- Third priority: Malnutrition
- Fourth priority: Malposition
- Fifth priority: Eclampsia and hemorrhage

Methodology:
- Case finding: Village Health Aid and Community Medical Technician in patient's village
- Prenatal check: Monthly by maternal health technician; trimonthly by midwife
- Hospital delivery: High risk cases
- Home delivery set: Normal cases

Staff Personnel Involved:

| | |
|---|---|
| Village Health Aid | (1/500 population) |
| Community Medical Technician | (1/2,000 population) |
| Maternal Health Technician | (1/10,000 population) |
| Midwife | (1/30,000 population) |
| (Obstetrician, when necessary) | (1/100,000 - 200,000 population) |

#### 2. Child Health

Target Population:
- First priority: Under 2 years, high risk
- Second priority: Under 6 years, high risk
- Third priority: Under 2 years, general
- Fourth priority: Under 6 years, general

Target Problems:
- First priority: Malnutrition
- Second priority: Lack of health education
- Third priority: Communicable disease
- Fourth priority: Prevention of dental carries
- Fifth priority: Others

Methodology:
Well-baby and Immunization Clinic: Monthly by Village Health Aid and Community Medicine Technician
High risk case finding: By monthly weights, examination, etc.

Staff Personnel Involved:

| | |
|---|---|
| Village Health Aid | (1/500 population) |
| Community Medical Technician | (1/2,000 population) |
| Community Medical Nurse | (1/10,000 populatio |
| (Primary Care Unit Physician if necessary) | (1/30,000 populatio |
| (Pediatrician, if necessary) | (1/100,000 - 200,00 population) |

3. Family Planning

Target Population:

| | |
|---|---|
| First priority: | Maternal Health high risk women |
| Second priority: | Delivered within past year |
| Third priority: | Others |

Target Problem:

| | |
|---|---|
| First priority: | Ignorance and misinformation about Family Planning |

Methodology:
Group education programs
Home visiting (multiphasic)
Maternal-Child Health and Family Planning Clinics

Staff Personnel Involved:
Same as Maternal Health

4. Tuberculosis

Target Population:

| | |
|---|---|
| First priority: | TB patients and family |
| Second priority: | Infants (immunization with BCG) |
| Third priority: | Patients with cough for one month |
| Fourth priority: | Primary school PPD screening and BCG innoculation |

Target Problems:

| | |
|---|---|
| First priority: | Education |
| Second priority: | Case finding |
| Third priority: | Adequate treatment |

Methodology:

| | |
|---|---|
| Village TB Clinic: | Monthly (Aid and Technician) |
| OPD TB Clinic: | Trimonthly (Physician) |
| Home Visiting: | Problem cases |
| | Treatment dropouts |
| | Contact checks |

Staff Personnel Involved:

- Village Health Aid
- Community Medical Technician
- TB Follow-up Technician
- Community Medical Nurse
- Community Medical Physician (Intermittent S.O.S.)

5. Dental Care

Target Population:

| | |
|---|---|
| First priority: | School teachers |
| Second priority: | Primary school students |
| Third priority: | Middle school students |
| Fourth priority: | High school students |
| Fifth priority: | General population |

Target Problems:

| | |
|---|---|
| First priority: | Ignorance and lack of good dental hygiene |
| Second priority: | Dental plaque |
| Third priority: | Carries |

Methodology:

- Education at teacher seminars
- Education at schools
- Brush-ins at schools
- Scaling at schools and village clinics
- Extractions as necessary

Staff Personnel Involved:

- School health nurse
- Visiting dental teams
- Community medical technicians

6. School Health

Target Population:

| | |
|---|---|
| First priority: | High and middle school |
| Second priority: | Primary school |

Target Problems:

| | |
|---|---|
| First priority: | Communicable disease and sanitation |
| Second priority: | MH - FP sex education |
| Third priority: | Dental health |
| Fourth priority: | Mental health |
| Fifth priority: | Child health and nutrition |
| Sixth priority: | Common diseases |
| Seventh priority: | Others |

Methodology:

Education at schools
Preventive treatment at schools
Simple curative treatment at schools

Staff Personnel Involved:

School health nurse

## Second Priority Services

1. Early Simple Curative Care

Target Population:

| | |
|---|---|
| First priority: | Infants and preschool children |
| Second priority: | Mothers |
| Third priority: | Others |

Target Problems:

| | |
|---|---|
| First priority: | Ignorance, economic difficulties or distance from practitioner resulting in delayed or inadequate care |

Methodology:

Use of trained paramedical workers and nurse practitioners using standing order type treatment instructions for specific conditions

Staff Personnel Involved:

| | |
|---|---|
| Community medical technician | (1/2,000 population) |
| Community medical nurse | (1/10,000 population) |
| Community medical midwife | (1/30,000 population) |
| Program trained local druggists | |

B. Personnel Description

Township Area

1. Village Health Aid: 1 VHA/100 families (Village Health Aid)

Training:
4-8 weeks

Responsibility:
MCH, FP, TB, DH, and First Aid (Maternal Child Health, Family Planning, Tuberculosis, Dental Health, and First Aid)

Remuneration:
Volunteer 12,000 Won/year plus transportation expenses

Candidate Requirement:
Middle school graduate

Supervision By:
CM Technician (Community Medical Technician) to whom she reports weekly

2. Community Medical Technician: 1 CMT/2,000-2,400 population (4-5 VHA)

Training:
6 months (in-service training in villages)

Responsibility:
Full Basic Programs in MCH, FP, TB, DH, and ESCC (Early Simple Curative Care), including Educatior Prevention, Treatment, and Referral

Remuneration:
Regular staff salary

Candidate Requirement:
High school graduate

Supervision By:
CM Nurse (Community Medical Nurse) to whom she reports: (a) by phone every other day, (b) weekly at the clinic, and (c) monthly in villages

3. Maternal Child Health Technician: (Note: To be replaced and responsibilities covered by CM Nurse as soon as training of the latter is adequate)

Training:
Same as CMT with whom they rotate every 6-12 months, plus special training in MCH.

Responsibility:
Monthly check of all pregnant and recently delivered mothers in the area, especially those in the high risk category

Remuneration:
Regular staff salary

Candidate Requirement:
Same as CMT

Supervision By:
CM Midwife (Community Medical Midwife) to whom she reports daily

4. Specialty Technician:

Training:
Same as CMT with whom they rotate every 6-12 months, plus special training in one of the following: (a) treatment, (b) TB and follow-up, or (c) pharmacy

Responsibility:
To cover specialty responsibility in Primary Care Unit Base Clinic

Remuneration:
Regular staff salary

Candidate Requirement:
Same as CM Technician

Supervision By:
CM Nurse covering clinic

5. Community Medical Nurse:

Training:
Graduate of Nursing School, plus 6 months training in Community Medical Nursing including MCH, FP, TB, DH, and ESCC, with emphasis on the latter

Responsibility:
a. Supervision of all CMT programs with referral of pregnant women to MCH Technician when present for prenatal checks. Visits each of 4 or 5 CM Technicians for 3-4 days per month.
b. Rotates coverage of Primary Care Clinic with other CM Nurses.

Remuneration:
Regular staff salary

Candidate Requirement:
Nursing School degree. Available for at least 18 months rural service

Supervision By:
Primary Care Clinic Physician and supervising CM Midwife

Tri-Township Area

6. Community Medical Midwife:

Training:
Graduate of Nursing School and Midwifery School (1 year), plus two months training in other aspects of Community Medical Nursing

Responsibility:
Supervision of MCH Technicians, CM Nurses, and CM Technicians doing MCH care in villages. Supervision of uncomplicated deliveries at clinic. Referral of complicated cases to supervising midwife or obstetrician.

Remuneration:
Regular staff salary

Candidate Requirement:
Nursing School degree, Midwifery School degree. Available for at least 18 months of rural service.

Supervision By:
Supervising CM Midwife

7. School Health Nurse:

Training:
Nursing School graduate plus 2 months special training in school health

Responsibility:
a. School Health in all middle and high schools in the area.
b. Arrangements and supervision of teachers' seminars on health education.

Remuneration:
Regular staff salary

Candidate Requirement:
Nursing School graduate. Available for at least 18 months of rural service.

8. Supervising Community Medical Midwife:

Same as CM Midwife, plus significant experience as CM Midwife.

9. Community Medical Physician:

Training:
Licensed practitioner with experience in general practice, understanding of Community Medicine principles and willingness to both cooperate with and develop the Primary Care Program.

Responsibility:
a. Supervision of Primary Care coverage of all patients in his area (usually 2-3 townships).
b. Referral of patients needing secondary care to community hospital.

Remuneration:
To be decided.

Supervision By:
Director of Primary Care Program

The wide range of medical training and ability present among rural licensed physicians makes some form of refresher courses mandatory.

10. Community Medical Druggist:

Training:
Licensed druggist with experience and with drug store in area who attends the training session for druggists at the primary care training center and is willing to cooperate with the Primary Care program.

Responsibility:
Early curative care of villagers in his area in cooperation with the paramedical team.

Remuneration:
To be decided.

Supervision By:
Community medical physician

## C. STAGE ONE BUDGET (1975)

| TOWNSHIP | RUNNING EXPENSES (A + B) | SALARY (A) | MAINTENANCE (B) | CAPITAL EXPENSES (C + D) | EQUIPMENT (C) | BUILDINGS (D) |
|---|---|---|---|---|---|---|
| Ha Chung | ₩ 24,059,333 | ₩ 11,228,000 | ₩ 12,831,333 | ₩ 4,530,000 | ₩ 4,530,000 | --- |
| Kohyun | ₩ 38,050,999 | ₩ 13,804,000 | ₩ 24,246,999 | ₩ 26,940,000 | ₩ 5,940,000 | ₩ 21,000,000 |
| Doon duk | ₩ 10,564,533 | ₩ 5,432,000 | ₩ 5,132,533 | ₩ 9,140,000 | ₩ 1,840,000 | ₩ 7,300,000 |
| Jan Goo | ₩ 5,531,833 | ₩ 2,324,000 | ₩ 3,207,833 | ₩ 7,940,000 | ₩ 1,740,000 | ₩ 6,200,000 |
| Okpo | ₩ 40,295,600 | ₩ 9,500,400 | ₩ 30,795,200 | ₩ 33,370,000 | ₩ 5,230,000 | ₩ 28,140,000 |
| TOTAL | ₩ 118,502,298 | ₩ 42,288,400 | ₩ 76,213,898 | ₩ 82,920,000 | ₩ 19,280,000 | ₩ 62,640,000 |

## D. BUDGET TOTALS BY STAGE

| | TOTAL RUNNING EXPENSE | SALARY | MAINTENANCE | TOTAL CAPITAL EXPENSE | EQUIPMENT | BUILDINGS |
|---|---|---|---|---|---|---|
| First Stage | ₩118,502,298 | ₩42,288,400 | ₩76,213,898 | ₩81,920,000 | ₩19,280,000 | ₩62,640,000 |
| Second Stage | ₩184,174,732 | ₩72,884,000 | ₩111,290,732 | ₩12,400,000 | ₩600,000 | ₩11,800,000 |

# APPENDIX B

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